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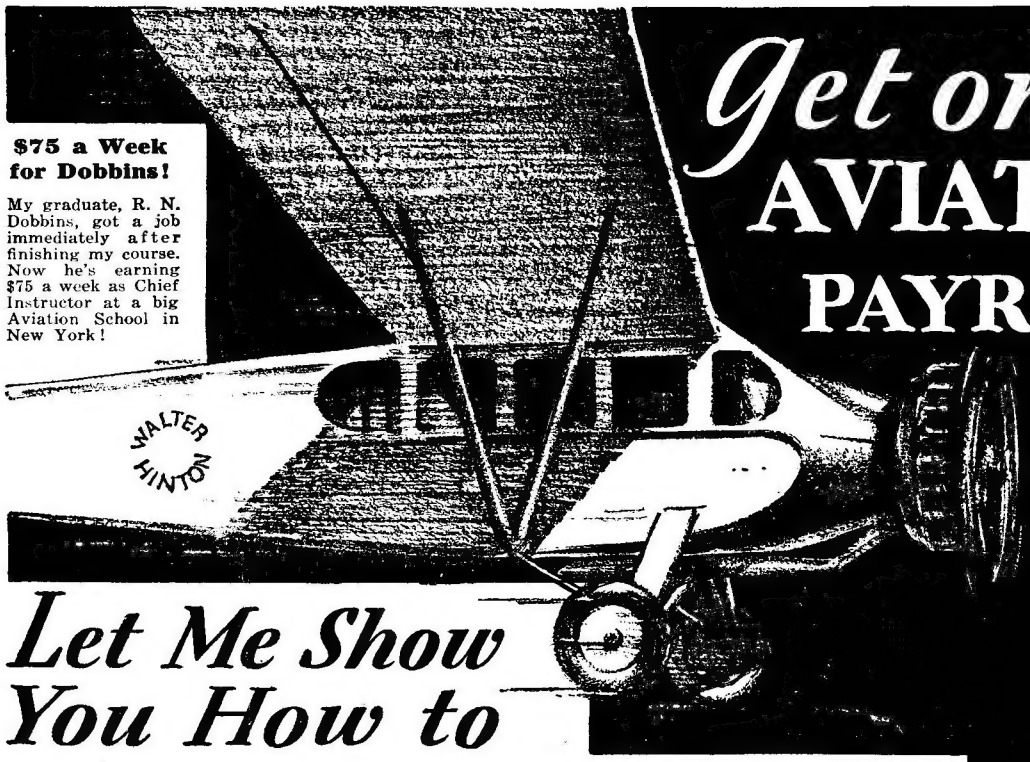

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AMAZING STORIES

Scientific Fiction

Vol. 7 **September, 1932** **No. 6**

In Our Next Issue

SPACE ROCKET MURDERS, by Edmond Hamilton. Here we have once more a thrilling interplanetary invasion story by this well-known author. To those of our readers who began to wonder if there is anything new under the sun after all, we say, read Mr. Hamilton's brand new science fiction novelette in this issue.

THE FIRST MARTIAN, by Andrias and Otto Binder. Continued experiments in radio and television may play a considerably more important rôle in the eventual realization of successful interplanetary travel than one could possibly conceive of offhand. And after some consideration, it seems to us small wonder, for the close alliance between radio, television and rocket travel must, of necessity, bring forth wonders in the future.

THE SWORDSMAN OF SARVON, by Charles Cloukey. (A Serial in three parts) Part III. In the concluding chapters of this thrilling serial, the author quite excels his fast pace of exciting episodes and answers even the most rabid science fiction devotees the numerous questions which may have worried them through the first and second instalments.

INFRA-CALORESCENCE, by R. I. Melhorn. Here is an extremely interesting variation on tales of radiation of electric-heat waves, which provides unusual side-lights on the dangers of far-reaching scientific inventions. A short, short story.

WRATH OF THE PURPLE, by Howard Melvin Fast. Experiments with amoebas, protoplasm, and other gelatinous masses has, in reality, been the cause of much trouble. Yet the possibilities have certainly not been exhausted thus far. Perhaps for that reason—and it is not the only one in this case—"Wrath of the Purple" makes such absorbing reading. It is a *different* story.

And other unusual science fiction.

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Our Cover

this issue depicts a scene from "Prometheus," the last of a series of stories entitled, "The Lemurian Documents," by J. Lewis Burtt, in which Prometheus is shown in his rocket in a mad attempt to extricate himself, or his rocket, from the attraction of the sun.

Cover Illustration by Morey

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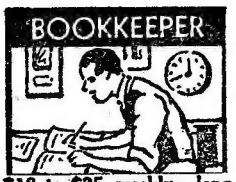

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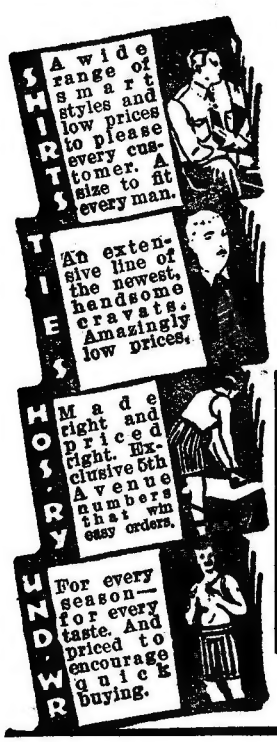
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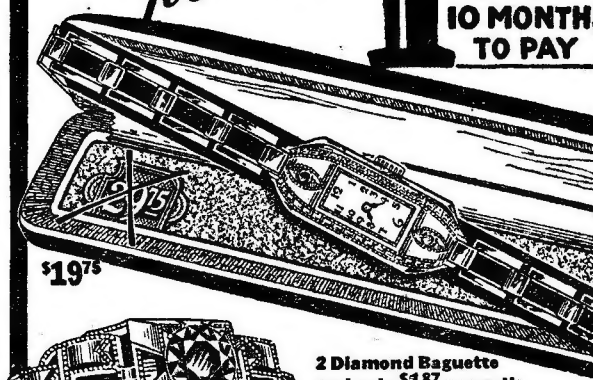

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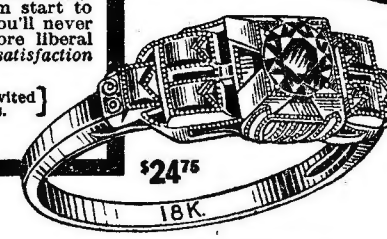

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VOLUME 7

AMAZING STORIES

THE MAGAZINE OF SCIENTIFICTION

SEPTEMBER, 1932 No. 6

T. O'CONOR SLOANE, Ph.D., *Editor* MIRIAM BOURNE, *Managing Editor*

Editorial and General Offices: 350 Hudson Street, New York, N. Y.

Extravagant Fiction Today - - - - - - - - - - Cold Fact Tomorrow

Lost Motion

By T. O'Conor Sloane, Ph.D.

IN the long ranks of hand tools used by mankind, there must be one which is the smallest of all and one which is the largest.

These tools operate on different systems. In some cases as in heavy rammers and hand operated pile drivers, the actual work may be done principally by the heavy tool. The operation is simply having to lift and release it so that it adds as it descends its own weight to its energy in its fall, but often the thrust due to its weight might represent only a small fraction of the blow. We even have the ancient pile driver where the heavy ram which gave the blow to the pile to be driven into the earth was pulled up by a rope passing over a pulley with perhaps a dozen men at the end or ends, raising the weight and then suddenly releasing it. Here was an example where the work was done entirely by the heavy ram or weight. Operated in this way by hand, it would seem fair to call the old manual pile driver a tool and it would probably figure as the heaviest tool operated manually. Then we can come down through the long series of man's instruments until we get to what is fairly to be considered as the smallest tool used by man.

This tool is the needle, whose small size with its minute eye for thread and shaped so as to help in the threading and not to cut the thread, in itself is a wonderful production.

We are in the machine age, so machinery is now used to make needles, but in old times they were hand-made. It must have required unbelievable dexterity to manufacture them.

One of the troubles in the manipulation of tools and machinery is what is known as lost motion which is wasted work, and here we have cited the needle as an illustration of how lost motion is avoided in mechanical construction. Thus in hand sewing, supposing there are twenty stitches to the inch, each thrust of the needle advances the work only one-twentieth of an inch. The thread has to be tightened so as to bind the stitch and if we suppose that the thread is only eighteen inches long, then to gain a twentieth of an inch we would have practically eighteen multiplied by twenty or 360 parts of lost motion on the upstroke and the same on the return of the hand to the seam. It would be hard to find a better example of this mechanical defect, as we may term it, than in the practice of hand sewing. If we figure the weight of the arm as it moves for each stitch, the waste of energy is simply appalling.

Long ago the sewing machine was invented and the eye near the point of the needle at once reduced lost motion enormously. The needle for each stitch moved a fraction of an inch down and a fraction of an inch up and that was all. It would be hard to find in the world of mechanics a better illustration of the doing away with lost motion.

In the reciprocating engine, such as is used in automobiles, each cylinder pushes the crank half way around in one stroke. The next stroke is devoted to pushing the products of combustion out of the cylinder into the exhaust and muffler, then comes another stroke when it draws the mixture of gasoline and air into the cylinder, then the fourth stroke when it compresses the mixture and is ready for the one efficient stroke out of the four. The reference here is to the four cycle engine. Only one one-quarter of the travel of the pistons in the cylinder operates to turn the shaft, so that the operation represents about 75% lost motion.

The vast majority of engines and motors are driven by the operation of pressure upon a crank. The crank has what are called dead points. Here there is no lever-arm and any force inserted at the dead points does nothing. Half-way between the dead points the pressure works to maximum advantage. Again we find what seems to be a startling imperfection in mechanics, practically lost motion again, and which imperfection inventors have tried to get rid of by devising what are known as rotary engines, where an even revolution is maintained without the existence of dead points. After years of more or less futile inventing and experimenting the steam turbine has been perfected and has in numerous cases, especially in ships, replaced the old reciprocating engine with its dead points. The only thing that saves the reciprocating automobile engine is its heavy fly-wheel, which, in a way, gets rid of its dead points by its momentum.

In the human being's activities we can find other examples of lost motion. In walking, the leg has to be raised and brought forward for a new step and certainly the swing of one leg after the other through space may be taken as representing lost motion. It is perfectly fair to say that what fatigues us in walking on a level surface is the lost motion. In the mechanical sense, moving on a level surface no work is done, yet we will be fatigued if we keep it up long enough, so we find in lost motion all that fatigues us in walking on a level track. The saving clause is that there is very little mechanical friction for us to cope with. Mechanics in general are a world of imperfections. Think how many feet the head of a hammer will travel through in driving a nail an inch or two into a board. If we consider the downstroke of the hammer as utilized motion the raising of the hammer head is certainly lost motion.

If we could get rid of lost motion in mechanics, it would be a most wonderful step in advance.

The Lady of Light

By Jack Williamson

Author of "The Prince of Space," "The Stone from the Green Star," etc.

THE advances in the realm of science have barely even touched the outer rim of the vast circle of possibilities. With the progress made in the industries of synthetic commodities at the present time, perhaps the future will bring us not only synthetic foods, but perhaps some means will be found to draw various life-giving forces from the cosmos direct. In this seemingly fantastic story by our well-known author, numerous phenomenal theories are propounded, which are of unusual scientific interest.

CHAPTER I

"The Dynamite Hearse"

"ALL aboard the graveyard special!" Eric Locklin called, in the bitter humor that was characteristic of him. I tried to smile at him; but my own nervous tension was so great, that the effect must have been rather sickly, for Eric turned quickly toward me, and inquired politely if I needed smelling salts.

"The old world is just a nasty muddle, anyhow," he went on, in the same grim vein. "It ought to be a relief to leave it behind, and see if the Creator—or evolution, if you please—didn't mold with a surer hand on some other planet. And if the old hearse goes wrong, what do we amount to, anyway? A few messy pounds of protoplasmic slime, plastered over a framework of mineral salts!"

He grinned at me, and tossed his head in an odd way that he had.

I had known Eric Locklin too long and too well to take him seriously. I knew that his bitter, sardonic pessimism was assumed—that it was merely a cloak that he wore to shield from the cruel laughter of the world, a nature that was delicately sensitive and finely idealistic. It was a cloak of pretended cynicism, often thrown aside.

No man could have been more truly enthusiastic about our mad venture than was Eric. Yet he had ridiculed the attempt from the first. From the day that we had begun erecting the skeleton girders of the rocket, he had termed the vehicle the "dynamite hearse." But despite all his talk of disaster, he had never once spoken of abandoning the project.

It was in the early summer of 1930. The vast acres of prairie were richly green with new grass; the limitless rolling expanse of emerald was dotted with dark specks that were grazing cattle. A soft wind breathed cool and invigorating beneath a limpid sky. In spite of Eric's unfelt sneers, the earth had become suddenly very attractive to me—to my own surprise, I found myself shrinking from the thought of leaving it so precipitately.

We had just stepped outside the faded, weather-beaten old ranch house, in which I had lived, for many years, before I established the new ranch headquarters a dozen miles across the range, near the railroad. Vividly green locusts were clustered about the wide yard—the only trees in many square miles of this open range of eastern New Mexico.

And the rocket—which Eric insisted upon terming the "dynamite hearse"—reared its gleaming bulk just beyond the masses of darkly green foliage. The morning sunlight scintillated with blazing fulgor on its plates of polished beryllium bronze, and on its wide observation ports of pure fused quartz.

"And I will hide you in the head of it. Space there is, for you to live there. And I can always be near you," said Sharathon.

Squat and massive the rocket was, a thick metal cylinder capped with a dome. The full tanks of the secret liquid fuel, the mixing chamber and the powerful pump, and the reaction motors, were located in the cylinder. And in the dome above, behind the glistening ports, were our narrow quarters.

I closed the door of the kindly old house behind us, and Eric strode easily ahead of me toward the looming, splendid mass of the rocket.

"Zero hour is eight-seventeen," he said, glancing at the watch on his wrist. "We've just twenty-nine minutes to go. Time to get aboard, inspect the pump, make our wills, and say our prayers. The old hearse is going to give us some blow-out of a funeral, anyhow, Higdon. Attila the Hun, with his golden coffin and all, isn't even a side-show, compared with what we will do!"

But there was unmistakable eagerness in his step, as he swung ahead of me, under the trees, toward the ladder of thin metal strips, which ran up the smooth side of the rocket, to the air-lock in the top, at the center of the dome.

A big man, Eric was. Six feet two, and massively built. He always seemed to move slowly, almost ponderously—yet there was a deceptive quickness about him. And I never knew a man who could stop him. He was dark of face and hair. His gray eyes were solemn, save when illuminated with a flash of his rare humor. Thirty-one years old, he was handsome only in a rugged sort of way, as any powerful man is handsome.

I loved Eric Locklin, as I might have loved a son of my own. And almost I regarded him as a son. His father, Dr. Alvin Locklin, and I, were roommates at Yale, many years ago—our intimacy had been only partly severed when, soon after graduation, I had been forced to come West for the sake of my health. Eric, as boy and young man, had been a frequent visitor at the ranch I had acquired.

When Dr. Locklin had died, after a lifetime devoted to research on the subject of rocket designs and rocket fuels, Eric had naturally come to me, Vernon Higdon, with his father's plans and models. He had proposed that we build an experimental craft, and undertake a voyage to the moon.

While I had been at first a skeptic, I had soon come to share the burning, though concealed, enthusiasm of the young engineer. It had been possible for me to find the eighty thousand dollars required for the construction. And the old ranch house, no longer in use, had seemed an excellent place to work on building the machine, without attracting unwelcome publicity.

On the previous day the months of work had been ended, the temporary shed torn down from over the rocket, and the few hired mechanics sent back to ranch headquarters, on their way to the railroad and civilization.

There were to be no witnesses of the ascent, unless some curious cattle hand happened to be watching, from the range.

Eric climbed ahead of me, up the flimsy ladder. He paused on the little metal platform, beside the entrance to the air-lock, and muttered, "Good-by, old world—and Allah save you!"

He bent, turned a wheel, and the massive outer valve swung open.

He leapt lightly down into the chamber; I heard the clang as the inner valve opened. In a moment he called me to follow.

I WAS soon in the ten-foot dome, with its floor and walls elaborately cushioned to absorb the shocks and pressure of acceleration, with its masses of intricate navigation instruments, and its cylinders of oxygen which were to replenish the vital element in the air, with the vacuum jars of food and the few articles of personal use which we had permitted ourselves.

Eric dropped himself through the manhole in the floor, to make a last inspection of the mixing chamber into which the chemicals in the tanks were admitted in proper proportion to form Dr. Locklin's secret liquid fuel, and the powerful pump which forced the explosive mixture into the combustion chambers, against reaction-pressure.

I discovered that a curious apathy had seized me. On the day before I had been wildly excited, filled with mad enthusiasm for the adventure. Now I felt dull and listless. I stood beside the broad, quartz observation panels, staring out unseeingly at the old, time-faded house, with the dark trees massed about it, and the wide, cattle-dotted sweep of vividly green, sun-lit range beyond. I recall that I mechanically started counting the piles of planks, which had formed the demolished shed under which we had built the rocket, and that I forgot the numbers before I had finished.

Eric startled me when he climbed back up into the dome.

"Time to select your last words, and note them down for posterity!" he called. "The motors are set to fire in three minutes!"

With a last, vaguely regretful look at the serene and lovely world beyond the windows, I lay down on the cushions, carefully disposing my limbs against the shock. I saw Eric doing the same.

Then an eternity seemed to pass. My heart was thumping very hard, and each beat of it seemed at first the beginning of the explosion. I recall that I wanted to say something to Eric—what it was, I cannot remember—and my mouth was so dry that I could not form the words.

Finally, when I thought that the mechanism must have failed to set off the rockets, it seemed that I was forced with cruel, crushing pressure against the floor. My body seemed made of lead; I struggled in vain to adjust my limbs to a more comfortable position. The breath was forced from my lungs; I could not lift my chest to get it back again. I felt as if I were being crushed beneath the foot of a malevolent giant.

A shrieking, bellowing roar beat upon my eardrums—the screaming of incandescent gases from the multiple exhausts.

That torturing, unendurable pressure seemed to last through dull ages of pain. Then suddenly there was a deafening, shattering report. A wicked tongue of bluish flame stabbed up through the manhole, from the rocket-room. The machine seemed to swerve abruptly, so that I was flung over against the cushioned wall.

The shrill screaming of the reaction-motors died quickly. A great silence seemed to flow into the cramped space about me. At the same time, it seemed that all my weight was gone. I floated above the cushions, experiencing an indescribable and not wholly pleasant sensation of utter weightlessness.

"Something gone wrong!" Eric muttered.

I turned and saw him. His face was white, and he had a bleeding bruise on the temple, where his head must have struck some instrument when the rocket had

swerved. We were plainly floating free in space, for he seemed to have no weight. He moved through the air much after the manner of one learning to swim, struggling toward the manhole from which I had seen blue flame burst. He reached it, drew himself through it, beyond my sight.

My glance strayed to one of the quartz windows, and I could not repress an exclamation of wonder. Outside was—interplanetary space!

The sky was densely, utterly black. The stars were hot, vivid points of light against it, points of many brilliant colors. Among the glittering gems of the stars were faint silvery veils and tracery of distant nebulae. A supernal light, strange and wonderful beyond conception!

I looked through another window. Through it, the earth was in view. A huge, mottled sphere, of vaguely greenish, luminous color. Familiar continental outlines were traceable through its mists. One side of it was dark, the other splendidly brilliant in the sunlight.

I dared not try to see the sun itself, lest it blind me.

Eric had heard my cry of astonishment.

"What's the matter, Higdon?" he called.

I told him what I had seen. And in a moment his voice came from below.

"Our address is on board, till further notice," he said. "The pump and mixing chamber are blown to kingdom come! Fire somehow got past the valves—I suppose the combustion chambers got too hot. And the fuel in the pump and the mixing chamber exploded."

"Can you fix it?" I called.

"Fix it hell!" he burst out. "Nothing left to fix, but a few scraps of twisted steel. A wonder it didn't blow a hole in the shell, and let our air out! Nothing to do but sit and wait for something to happen. Or you might call up a garage, and have a wrecker sent out, to tow us in!"

With a sunken heart, I made my way to the manhole, and peered through it. A single glimpse of the twisted and blackened wreck of the mechanism was enough to assure me that repairs were out of the question.

Presently Eric clambered wearily back to join me.

As the hours passed, we took occasional readings with the navigation instruments. For some time the earth continued to dwindle behind us, as we shot on out into the frozen vacuum of space. Then presently its size remained constant. Soon our computations revealed that the rocket, due to its swerving at the last instant before the motors had stopped, and to the combined attractions of the sun and the moon, had fallen into a regular orbit about the earth, at a mean distance of nearly eighty thousand miles.

The ship had become a second moon!

We seemed destined, through the ages, to swing endlessly about the earth, in the chill and airless void of space.

"Dynamite hearse was right," Eric said. "And what vault could be safer than this machine, beyond the reach of the elements and our destructive fellow man? We ought to last forever! Our situation would fairly turn an old Egyptian mummy green with envy!

"You know, I'm sorry, though, that the old pump exploded. We had a fair chance to get to the moon. . . . I really wanted to see a little more of life, before I checked out. Anyhow, we gave Lady Luck a good run for her money!"

Nothing shows the true nature of Eric Locklin better than the fact that he grinned and then seized my hand impulsively and gripped it crushingly, and presently began to trace the constellations in the wondrous gem-ceiling of the void.

I cannot endure going deeply into the details of the days that followed—as I look back, it seems an age of nightmare. During the first few hours it was tolerable enough. But soon the air became foul, and even fresh oxygen from the cylinders hardly made it breathable—our equipment for absorbing the wastes was crude and unsatisfactory.

Soon we were both very weak, hardly able to move about, even in our weightless condition. And we suffered the agonies of suffocation, strangling, gasping, fighting for breath, reeling with dizziness.

At last, unable to endure it any longer, I determined to leave the rocket through the air-lock. The unthinkable cold of space, and the total lack of air, I knew, would very soon end my pain. But I was already too weak to handle the massive valves. And Eric refused to help me leave the ship.

"No fun—"he gasped weakly, "to stay—in here. But stick—with me. You aren't licked—till you know it!"

I abandoned the attempt. For a time, I must have been insensible again. Then Eric was shaking my shoulder, trying to whisper something to me, whispering something that sounded like the raving of delirium.

"Light—light! Someone—coming! Look!"

CHAPTER II

Sharothon, Lady of Light

MAD and incredible as Eric's words were, I dragged myself weakly to the nearest of the quartz windows. I saw only the cold and terrible splendor of the vacant gulf, the gemmed veil of far-off, frozen stars. I shrank back from the supernal wonder of it, at the thought that never again would I see a kinder vision.

Eric drew himself laboriously across the dome, let the last few pounds of our hoarded oxygen hiss from the steel cylinder. A breath of the precious gas was like an invigorating draft.

Then he was beside me, pointing out at the star-jeweled tapestry of space.

"Watch!" he gasped, in a voice that had grown a little stronger. "The rocket is turning. Soon you will see. *A human being!*"

Indeed, the vessel was spinning slowly, like a little planet in the void. The blazing constellations wheeled slowly and majestically past the window. Then there came into view—an astounding thing.

A woman—a girl—floating swiftly toward us through the awful emptiness of space. Already she was very near—perhaps forty feet beyond the window—and drifting slowly closer. I could distinguish every detail of her superb form and of her strange or fantastic garments and equipment.

Against the utter blackness of space, her white body seemed almost luminous of itself—that is the reason, I suppose, that Eric afterward called her the Lady of Light.

Slim, firmly molded, statuesque, she was lightly swathed in sheerest fabric of brilliant green, in filmy webs of emerald flame. The green, gauzy tunic was held about her slender waist by a curious girdle, studded

with tiny ruby cylinders, and looking as if it were made of polished silver. In one white hand she grasped a long, thin staff or rod of bright green crystal, from which little silvery levers projected beneath her tapering fingers.

A faint haze or nimbus of violet luminosity surrounded her—she was swimming in a little cloud of pale violet light, which moved with her.

The lower end of the emerald rod was pointed behind her, and little irregular jets of vividly white flame were issuing backward from it—somehow I got the impression that the white flame was *thrusting,* that it *pushed* her, as the flaming discharges of our rockets had hurled us from the earth.

Sun-golden hair was massed about her lovely head. She was looking at us, as if intensely interested, wonderingly. Her level eyes were deeply blue as great sapphires—not gem-cold, but warm and kind.

Slowly she drifted nearer, clothed in her wondrous *aura* of violet light, until she floated just outside the quartz windows of the rocket's dome, eyeing us in fascination deep as ours.

At first my brain had been dazed with incredulous wonder. Now I became articulate.

"She's impossible!" I burst out. "Eric, we're seeing things! She contradicts all we know of space. Life is impossible out there. The temperature is unthinkably cold—hundreds of degrees below zero! There is no air, no oxygen to support life. And the vacuum of space would quickly suck all the moisture from any living thing. Anything alive would be dried and frozen before—"

"Can it, Higdon!" Eric gasped. "On the day of Judgment, you'll be trying to prove that the angels can't fly, because the air in heaven hasn't sufficient density. Look here—"

His voice died away, as he was once more eagerly devouring with his eyes the radiantly wonderful being outside the window.

Suddenly, with excited curiosity burning in her glorious eyes, the strange woman floating beside us in space pointed through the broad window at us, then swept her smooth white arm backward—toward the earth. She watched us, with a question in her eyes.

I was puzzled for a moment—my brain was dull with the exhausted air in the rocket. But Eric nodded at once. He made a gesture to include us and the rocket, then pointed earthward.

"She's asking where we came from," he muttered to me.

Suddenly he was silent. I saw that he and this wondrous denizen of space were looking into each other's eyes—deeply, eagerly, thirstily, as if in strange rapture. The girl was motionless. Her fair cheeks seemed flushed a little and her carmine lips were unconsciously parted to reveal even, flashing teeth. Eric seemed strangely pallid. His gaze was riveted upon the girl; he seemed hardly to breathe.

I almost felt a physical current passing between them.

Minutes must have passed, as Eric and the girl were transfixed in this strange communion. I realized that we were swiftly consuming the last of the precious oxygen, which Eric had liberated when he had seen the girl. The air was fast becoming unbreathable. I relaxed, floating weightless in the dome, gasping painfully for breath.

Suddenly Eric seemed to collapse. His dark eyes closed, his face went very white, and he fell against the window. It was asphyxiation, from which I feared that he would never recover.

I dragged myself to him. He was still laboring, though feebly, for breath. His pulse was terrifyingly weak. His hands were very cold, and I began trying to chafe them. But my own body was feeling leaden heavy. My head swam dizzily, and I feared that I might also collapse at any moment.

In my dull apathy of exhaustion and despair, I had, for the moment, forgotten the strange being who was floating outside the window. Now my attention was drawn by a tapping sound. I looked up, saw that she was watching anxiously through the crystal panel, and tapping with the emerald staff on the rocket's metal wall.

Compassion and horror filled her deep blue eyes; tender pity was on her lovely face. And from that instant I loved her. I knew that she was all human, all kindness. Wonder, I had for her still—but her strangeness was gone.

She made curious gestures with her white hands, as if swinging open the quartz window, entering the rocket. She wanted to come inside the machine!

I pointed to the massive mechanism of the air-lock, in the top of the dome. She gazed at it a moment, then nodded in quick comprehension. White flame jetted from the emerald rod, and she floated up beyond my view, toward the entrance.

I was reeling, blind, far gone in suffocation. Fighting with all my will the leaden inertia that was seizing me, I drew myself to the wheels that controlled the massive valves, began spinning them to seal the inner one, open the outer one.

Each movement, I felt, must be my last. But finally the task was done. Watching through the oval panel of quartz in the inner valve, I saw the strange girl slip into the chamber. Then I began the grim labor of sealing the outer door, and opening the inner one. Alone, I could never have accomplished it. But suddenly Eric, having recovered consciousness by some miracle of his rugged strength, had dragged himself up beside me, was toiling silently with me.

Then the inner valve was open, and the wondrous girl had floated down beside us. In my dull pain of utter fatigue, I had no idea what she might do to aid us. But I knew, somehow, that she would save us.

Eric had collapsed, again unconscious. I watched her eagerly.

Her slender, white fingers played for a moment over the tiny silver keys or levers which projected from the upper end of the green crystal rod, which was perhaps an inch in diameter, and five feet long.

A dazzlingly brilliant, blue-green glow came upon the lower end of the staff. I heard a curious hissing or whispering sound from it. Then my nostrils caught a whiff of fresher, purer air than I had breathed for many days.

EAGERLY, trembling, I bent forward, drawing in full breaths of the cool sweet air that came, as if by magic, from the end of the green rod, filling my lungs again and again, almost to the point of bursting. The effect was marvelous. A weight of oppression seemed to slip from upon me. By brain cleared. I felt my heart beating faster, pumping fresh blood to all my worn body. I experienced a miraculous tide of new strength and vigor.

Eric was still hanging inert, floating motionless in the air.

The wonderful girl reached out a slender hand, drew him very tenderly into the faint mist of violent radiance that bathed her, moving with her body. Supporting him within the curve of the arm that held the emerald staff, she gently caressed his brow with a small hand, while her great eyes looked down on him in tender compassion.

Then his dark eyes opened slowly. A quiet smile came over his rugged face . . . and he looked up into her eyes . . . .

"Thanks for the free air," he said in a moment, slipping from her arm, to turn and absorb her beauty with eager eyes. "It was never more welcome!" He seemed marvelously restored.

The girl pursed her lips curiously. In a moment a low, hesitant, charming voice came from them.

"Tankth fo' th' flee ah?" Several times she repeated it, questioningly, before I even understood that she was imitating Eric's "Thanks for the free air."

"She wants to talk, and doesn't know how!"I cried.

"Naturally, she doesn't." Eric said. "Speech would evidently be out of the question in space, with no air to convey sound waves. Let's see." He paused. "We might try pictures."

He fumbled in the pockets of his clothing, produced a fountain pen, and a tattered notebook. The great blue eyes of the girl followed his hands with intense interest as he unscrewed the cap of the pen, shook it to start the ink, and began making a rude sketch of the rocket's interior upon a blank sheet.

Having watched Eric's extremely poor drawing, for a few moments, she impatiently took the pen from him, smiling. After a brief examination she shook her head, and handed it back, as if it were useless. Then she lifted the slender green rod she carried, pointed it toward the other side of the tiny dome, and motioned for us to watch.

Her slender fingers flew over the little silvery keys or projections on the upper part of the rod. A pale, flickering ray of blue-white light shone from the end of the rod. And the ray appeared to condense into a madly swirling vortex of bluish fire, which slowly reached an intense brilliance, as the girl continued to depress the tiny levers.

Abruptly the pale ray flickered out. The rotating spirals of blue flame vanished suddenly. And where the light had been most intense, two tiny, glittering objects reposed on the floor of the dome—created as if by a magic wand.

The girl glided lithely forward, picked up the tiny things she had made so marvelously. Each of them was composed of two thin disks, perhaps an inch in diameter, of a darkly, richly blue substance resembling polished specimens of the copper ore called *azurite*—twin disks connected, as radio phones are connected, by a thin, flexible black band.

One of the objects she fitted upon Eric's head, the blue discs pressing upon his temples, the black, elastic band on his head to hold them in place. And the other one she quickly slipped upon my own head.

"Now we can talk. I want you to tell me who you are, and all about your coming here, and where you were going."

The words came to me from the lovely girl, plainly as any uttered speech—though her lips did not move! I had even an impression of a very pleasant tone of voice, though I knew she had not actually spoken. It was amazing.

"What is this?" I demanded, excitedly.

Again the girl's voice seemed to come to me, though I knew she was not actually speaking. "It is a device which my fathers perfected when first they came into the void, from the ancient planet that had been their home. It transforms thought-waves into vibrations which penetrate empty space, or picks up those vibrations and converts them back into such form that the brain can receive them."

"And how did you make it?"

"I drew from space the *ytlan*, fixing the fluid energy in the frame that is called matter, for matter and energy are the same—"

"Interesting subjects of conversation, to begin with," Eric broke in, with rather a savage glance at me. "I suppose we'll pretty soon be around to something thrilling—the multiplication table, for instance?"

The girl smiled at him.

"Of what do you choose to talk?" I felt, rather than heard, her question.

He looked at her oddly, for a long moment. He said nothing. But she must have understood something of his thought. For she smiled as if delighted. And her words came to me,

"That, indeed, is far more interesting!"

Eric flushed a little, and lowered his eyes.

"You come from the earth?" the girl's words, or perhaps I should say thought-images, once more reached my mind. "Why did you come? What did you seek? Did you not know the danger in leaving your world, with so crude a machine?"

"Yes, we knew it wasn't going to be a Sunday School party," Eric said. "And we come from the earth, all right. We were trying to go to the moon—and we'd have made it, if the darn pump hadn't blown up. But, you know, I'm very well satisfied with things as they happened—since we've found you."

She met his level eyes, smiled frankly back at him.

"A brave thing," her thoughts came. "It was a brave thing to do."

"Now," Eric said, "tell us where you come from, and how you came to find us."

"I will tell you," came her reply, "if time is given me. But I may have to leave you soon. I have broken a law of my people, in coming to you. And there is one who has claim upon me, who watches me very jealously. He may find that I am gone from my place, and come to seek me. For me it does not matter. But his coming would mean great danger to you. His anger is not slight!"

"Don't worry about us," Eric told her. "Our lives aren't matters of very great concern, in the present circumstances, anyhow. But, admitting that it's none of my business, who is this heavy?"

"Wait," came the thought-message from the girl, "and I will tell you of my people and myself. It will be amazing to you, for it is long ages since my fathers lived upon a planet, as you do.

"And if the one I fear comes while I tell the story, I will do my best to save you."

She paused a long moment, looking at Eric with a strange light in her glorious blue eyes. And then she shook her head.

"No," she went on, "the danger is too great. His power is next to that of Luroth. And Luroth, though

my friend, is too aged to be worried with my problems. I will mend your broken machine, so that it will take you back to your planet—that will take but a moment, with the power of the *ytlan.* Then I will leave you, before Kerak comes." After a moment she added, "Though I am sorry to see you no more."

Eric looked questioningly, pleadingly, at me.

"I'll stick," I told him. He smiled instantly, in vast relief.

"Then we're staying," he said to the girl. "You couldn't drag us back to the old world with a ten-ton tractor! And if Kerak, as you call him, turns up, we'll take our medicine. And by the way, what's your name?" he added.

"I am glad that you will stay," came from the girl "and I knew you would. Kerak will not harm you if I can avoid it. And my name is Sharothon.

"This is what I would tell you, of my people and of myself:

CHAPTER III

People of the Void

"MY fathers sprang up upon a planet which now exists no longer," Sharothon began. "Upon the planet that once was the fifth from the sun, next outside the red world which you call Mars. Now it is shattered into ten thousand fragments which wander through the gulf—"

"The asteroids!" I cried. "You know the theory of the Lost Planet, which must have been disintegrated by some unimaginable cataclysm to form them!"

Eric nodded.

"Yes, it is that world which I mean," Sharothon continued. "It was the science of my own race that wrecked that planet. And it was the science of the few who survived, that enabled them to migrate into space, and there make new homes for themselves, far more splendid than any city that had been built upon the doomed planet."

As I record this history, I cannot help but long for a more facile expression of thought. I cannot but wish for the persuasive ability of the great artist, to give the reader a living picture of the strange and lovely Sharothon, and of our surroundings, as she gave us, through the remarkable medium of the thought-transmission mechanism, the amazing story of her race.

The tiny, cramped, dome-shaped room, with its padded floor and walls, the masses of gleaming brass instruments, the bright crystal windows revealing the wonders of the jet-black, star-jeweled universal void—Eric and myself, floating in the air within the dome, in almost erect positions—two grimy individuals, clothing wrinkled and torn, faces pale and drawn from days of hardship. And resting in the air before us, splendid as an angel of light—

Sharothon!

Her incomparable body lightly clothed in luminous webs of green. The strange, silvery girdle about her waist, with tiny, polished cylinders or studs of bright ruby projecting from it. The long emerald rod held lightly, in a fair hand. Her azure eyes, watching us with keen and friendly interest, from her lovely oval face that was richly framed in softly glistening hair of russet-gold.

Her thoughts coming to us through the tiny blue disks that we wore upon our temples.

"Ages upon ages ago," her message came on, "my fathers won the mastery of that fifth planet, which now is shattered into countless fragments. Dead Mars was a young world then, with its strange creatures, but beginning the long climb that was to end in a hopeless battle to prolong the days of a dying world. And your earth was a planet of hot seas and steaming jungles, upon which hideous monsters reigned—there was scarce a beginning of the development of man.

"My people sought to release the boundless energy of matter—which they did not fully understand. The scientist who attempted it was killed. And strange green flame ate from his laboratory into the heart of the planet, and burst it asunder.

"All but a few of my kind died instantly. But a few among the scientists were warned, and prepared to face the cataclysm. When it was done, they found themselves living—and little more!

"For they were flung away into the void upon one of the bits of the lost planet, which you call asteroids. No air nor water could be held by the weak gravity of that tiny, fire-born world. Nor could plants be grown upon it for food.

"But two things were left for my people.

"They would either have to learn to live in a new way—or they would die!

"Great scientists were among them—and brave men. They lived.

"In space there is a great energy, which comes not from the sun, but fills all the void—that energy which we call the *ytlan,* which you call the Cosmic Ray. Though it is very powerful, the atmosphere of your world is largely proof against it—"

"Yes, I know how they have to go up on mountains to experiment with it," I put in. "Yet the ray will penetrate eight feet of lead."

"The *ytlan,*" Sharothon went on, with a smile and a nod at me, "was at first harmful to my people, beating upon the tiny new planet, which was unshielded by any atomosphere.

Many there were that weakened and died.

"But some lived on, and found ways to use the limitless power of the ray.

"First they found means of building matter from it. You know that the atoms of all matter are composed of electrons, and that the electrons are vibrating charges of electricity—of energy. Matter is merely a manifestation of energy in a certain form. And my people learned to condense the *ytlan,* with such rods as this I carry, into any material form that they required—as I made the little thought-amplifiers, through which I see your minds. They even made new forms of matter—that are lighter and stronger and more lovely than any of those in nature.

"And through ages, they caused certain changes in their bodies, so that the *ytlan* was no longer harmful—and other, greater changes, they wrought through the generations. The very living tissue was altered, so that its content of water is held in more firm chemical union, and cannot escape in the vacuum of space.

"And since there was little air upon that tiny world, upon which the remnant of my people battled for existence, nor any way to produce the substances they had used for food, new ways they sought for sustaining their bodies."

HERE Sharothon paused, dropped a slender hand through the dim mist of violet light that surrounded her body in a mysterious cloud, fingered the broad, silvery belt about her waist, caressed the ruby cylinders that studded it.

"This girdle," her message came on, "is the fruit of their toil. It draws upon the universal and illimitable energy of the *ytlan,* and transforms it into many other kinds of force, at my wish. You see the glow of violet light which is about me?"

"Yes," Eric breathed. "I'd been wondering—"

"It is an actinic radiation, of carefully adjusted frequencies," she went on. "In my body, it reverses the chemical reactions caused by fatigue, and the mere passage of time. It breaks up the poisons, formed when work is done, into fresh oxygen, and new food to be consumed again. Through it, I draw the energy of life from the *ytlan.*

"My people no longer need to breathe oxygen from an atmosphere. They must no longer consume the remains of other living things. Their bodies are directly maintained by the all-pervading power of the *ytlan.* They are freed forever from weariness and sickness—and the span of their lives is increased a thousand times, and more!"

"Gosh!" Eric muttered, "that beats a patent medicine ad!"

"And the girdle also generates other useful forces," Sharothon resumed, after a curious look at Eric. "It generates an invisible, insulating screen of force, which prevents the radiation of heat from our bodies—it protects us from the terrible cold of the void. It can also erect screens to cut our bodies off from the force of gravity, to prevent us from falling toward the sun or wandering planets. Or it can be used to create an artificial field of gravitation, to hold us firmly against even small objects in space."

"I begin to see how it is possible for you to exist!" I told her.

"Glad you can admit she isn't a dream," Eric shot at me. And he turned to Sharothon with the hesitant question, "What—er—do you mind telling us about yourself and this—Kerak, I think you called him?"

The strange girl's splendidly luminous eyes were speculatively upon him for a long minute, twinkling through the pale violet nimbus of the wonderful rays that enabled her to exist in the void. Then her thought-impressions came again:

"For time upon time, my people have been dwellers of the void—while Mars has grown old and died, while your earth has passed from hot youth far toward the chill of age, while the sun has dwindled and grown yellow, and Venus has cooled from a globe of flame. From a struggling few, their number has grown to untold legions—for all the universe was before them, to conquer, and the illimitable *ytlan* to supply all their needs.

"But a change—an ill change—has come upon them with the ages. The first who came to space—those who did the wonderful things of which I have told you—were brave men, and strong. They were warriors, mighty lovers. They accomplished Herculean tasks. Life was strong in them.

"Those great ones made all things easy for those who followed—too easy. And my people have become seekers of vain pleasure, questers of idle beauty, hunters of useless knowledge, dreamers of dead dreams. They serve but selfish ends in living, and all their endless numbers bring no good into the universe.

"The reality of life is gone from them, with the old flame of love, that drove our fathers to do great things. For ages few children were born—until the Nine, who are our rulers, mated my people, man and woman, by lot, and ordered that there be offspring.

"I am very young among my people—not even so old as you, Eric Locklin. But it seems that I am more like Luroth, my friend who is head of the Nine, and others who are very old—aged beyond thought. For I have always sought eagerly for stories of those great ones of the early ages, who loved strongly. Life, dead in most of my race, burns in me like a restless flame.

"By the lot, I was not long ago chosen to be companion to Kerak, who is a strong man, young, and leader of the idle young against Luroth, who is head of the Nine and very old—and very good. Kerak wishes himself to head the Nine. I hated Kerak, for he is proud and cold; and I would not bear his child. He came before the Nine, to force me to it. But the aged Luroth is my friend, and saved me from the foul touch of Kerak—but even he could not free me completely, for many in the Nine are young, and friends of Kerak.

"YOU wonder how I came here, far without the dwelling of my people? Know, then, that I often leave the portals of Yothanda—though there is a law against it—to watch what happens upon your earth. For your people are like the fathers of my people. The tide of life still flows strong in you. I see on your planet great loves, and noble deeds, that are become only a memory in Yothanda."

"Have you actually been to the earth " Eric demanded, surprised.

"No," she replied. "There I cannot go—not, at least, without great peril. Not to the surface of your planet. For, you know, the *ytlan*—the force you call the Cosmic Ray—is shielded from your world by the atmosphere. Only in tiny amounts does it filter as far as the tops of your mountains. And since the *ytlan* feeds my body, I could not live long without it.

"A few times, men of my race have been to your world. But not long could they stay—and come away alive. And for that reason, there is a law against visiting planets, even against leaving the Portal of Yothanda, lest adventurers stay overlong, become too weak to return, and die."

"I'm sorry to hear that," Eric said, looking at her with strange intentness. "I was hoping you could call some evening, for a little visit, after we get back."

"No, I can't go to your world," came the slow response. Then suddenly Sharothon's blue eyes flashed. "But I can take you to mine!"

"Great!" Eric cried.

"Wait," her thought commanded, doubtfully. "Vast will be the danger. If Kerak should find you, he would not be easy with you—or with me either, for that matter. But for me it does not matter."

"I'll take my chance," Eric said. "What about you, Higdon?"

"I'd risk anything for a glimpse of the home of these space dwellers," I said. "Yothanda, didn't she call it?"

"Good boy!" Eric shouted—though I am thirty years his senior.

"Then there is much to be done," came the thought-forms of Sharothon. She was suddenly animated; her

face was flushed with color; a great eagerness lit her splendid blue eyes. "We must leave this clumsy machine. Your bodies cannot be changed to exist in the void as mine does.

Caught

"But I can draw from the *ytlan* garments which will shield you from the cold and the vacuum. There will be means of clearing the air you breathe, and of replenishing the oxygen. And I can also make foods for you to eat, when you are hungry, like those substances to which you are accustomed. The radiations that restore my body are so powerful they would consume yours, which are not accustomed to such forces."

She stroked her white forehead, thoughtfully. I wish I could paint Sharothon as she stood there—or floated, rather, in the thin cloud of rose-violet luminosity—her superb body swathed in the filmy green tunic—the ruby studded silver girdle about her waist; the emerald staff in her hand—her blue eyes, a little perplexed, staring absently at Eric.

"Difficult, it will be to pass the Portal," her message came again. "And difficult to take you through the busy world of Yothanda, without letting you be seen. But I think I see a way to do it. And to hide you there—I know a place—'

Abruptly, the lovely girl stiffened, as if in alarm. The thought-message was cut off. And her head was turned rigidly, as if she were staring out through the metal plates of the rocket. The small hand at her side was suddenly clenched into a white ball. And white teeth were set against a red lip.

A sudden tremor shook her body. And she moved quickly toward the massive mechanism of the air-lock, through which she had entered the rocket.

Her thoughts came sharply to me. "Let me out! Quickly! Kerak comes. He is jealous of me; he watches me closely. I feared that he would find me gone from Yothanda, come to seek me. Great danger have I brought upon you, by staying with you. But I will try to save you.

"Quick! He comes swift as light!"

At her first warning, Eric and I had sprung to the wheels which controlled the valves. The inner one was already open—it was only a short time since the girl had entered through it. Eric motioned to her to climb back up into the chamber.

A moment she hesitated. She slipped a slender arm about Eric's great shoulders, drew him to her. Lightly, she set her lips against his forehead. It seemed a very natural thing to do.

And she did it naïvely—almost, it seemed, she did it unconsciously.

Then a jet of white flame from the emerald staff drove her upward into the chamber of the lock.

"Hasten!" came her imperative appeal. "Kerak draws near!"

Desperately we swung the wheels. The inner valve clanged shut. The air hissed swiftly out of the chamber, freezing in a white cloud in space. Then the outer gate was opened.

Watching through the oval window in the inside valve, I saw the slender, lovely form of Sharothon, wrapped in its rose-violet nimbus, drive out into space, outlined brilliantly against the starred darkness of the void.

"What a girl!" Eric breathed. "God, what a girl!"

CHAPTER IV

The Coming of Kerak

ERIC had drawn himself to one of the wide, quartz windows. Devoid of weight, he was floating queerly, beside it, holding with his hand to a light rail fastened below it.

"Look!" he called to me, abruptly. "The devil is right here on us. Sharothon is waiting outside—bless her. We get to see the show, if there is one. I wish—"

His excited voice died in a whistle of breath through clenched teeth. I hastened to pull myself over to join him.

Beyond the window was the ebon blackness of the void universe, sprinkled with the tiny, unwinking, many-colored points of light that were stars. The Milky Way was a broad and splendid path of silvery mist across it. And one wide, palely white wing of the Zodiacal Light was in view.

Against that strange and supernally beautiful background, we were to witness a weird and amazing drama—a dramatic struggle in which our own lives were at stake.

Not many yards from the window, Sharothon was waiting—floating in the void. A strange and lovely figure, mantled in violent radiance so pale that it did not obscure the whiteness of her slim body, nor dim the golden gleams of her massed hair, nor darken the glitter of the ruby-studded argent girdle about her green tunic and of the long green rod she held in her hand.

"Sharothon, the Lady of Light," Eric breathed. "Waiting, I suppose, to protect us. Maybe to fight for us. And us sealed up like sardines in a tin, not able to do anything!"

I saw that his nails were cutting into his palms; that he had set his teeth grimly. But suddenly he moved, pointed upward.

I looked, and saw a fleck of purple light, driving down across the black curtain of space. Swiftly it grew larger, more brilliant. And presently I could see a human form outlined within it.

Kerak!

In the space of a dozen swift breaths, he was drifting motionless in space, only a few yards before Sharothon—she had moved swiftly to keep between him and the rocket. I could see him with almost microscopic clearness.

His body, white-skinned, was huge, powerfully developed—it looked almost as strong as Eric's own. His abundant hair, worn long to his shoulders, was of a pale yellowish color, almost white. His face was strongly moulded, with the stamp of chill, severe intellectuality upon it—it bore no hint of kindness or simple humanity. His eyes were cold, palely blue—angry and merciless!

His body, like Sharothon's was bathed in a nimbus of light, though the glow which surrounded him was richly purple, darker than the pale violet about the girl. Like her, he wore a silvery belt, studded with ruby cylinders. Beneath it, he had on a loose tunic of soft black fabric.

He, too, carried a long rod. It was not green, like Sharothon's, but black as ebony.

He came to a halt a few feet before the girl, with a scowl of evil anger upon his hard face. His lips did not move, of course, for there can be no spoken communication in the airless void; their conversation was

one of thoughts. And for some resaon, the little blue disks upon our heads failed to make those thoughts intelligible to us—Sharothon must temporarily have insulated them in some way.

We could judge what was passing only by the visible actions of the man and the girl.

His scowls. His angry, threatening gestures. His overbearing manner. His possessive clutching at her shoulder, which she always deftly eluded. The cold, stern light that flashed in his pale eyes.

At first Sharothon was very quiet. Her face was white and drawn—but unconquerable fires were smoldering in her glorious blue eyes. From time to time, she seemed to shrink, to flinch unconsciously, as if from some foul insult. And after each involuntary flinching, her slender form grew straighter, and her eyes flashed more dangerously.

Then, very deliberately, and smiling at her in a mocking, taunting sort of way, Kerak raised the thin black rod in his hands, and pointed it toward the rocket from which we were watching.

That seemed to set off Sharothon's smoldering rage.

She flung up the green staff. A narrow tongue of white flame stabbed from it, toward Kerak. A blinding jet of white fire.

But it did not strike him. As she moved, he had dropped a hand to his argent belt; his fingers had found one of the red crystal studs. And a dense, rolling cloud of black shadow seemed to pour from the belt. Thick, billowing streamers of inky mist, that coiled around Kerak, hid his body from view.

OUT of that black mass reached a slender scarlet tongue. It was snake-like. A thin and flexible tentacle of brilliant scarlet. A ribbon of blood-red radiance, wavering, twining, *questing!*

The coiling, writhing end of it darted toward Sharothon!

It tried to wrap itself about her.

Thrusting white flame jetted from the end of her emerald staff. She darted backward, away from it. But the astounding tentacle of red flame grew longer, amazing, reached after her.

She, too, touched her silvery girdle. And the violet radiance that bathed her grew intensely brilliant, dazzling.

The wavering coils of the snake-like scarlet tentacle touched that nimbus of violet flame—and drew quickly back, as if somehow repelled, injured.

But it darted toward her again, the end of it moving like the head of a striking snake. Deep it penetrated into the dazzling violet cloud that surrounded Sharothon, before it was hurled back. Then, rapidly, it struck a third time—many times, so swiftly that the eye could hardly follow its flashing motions.

The girl tried to avoid it, retreated before it. But always that dread, living rope of red flame followed her, curving after her, reaching out from the billowing mass of inky mist in which Kerak lurked.

She raised her emerald staff, cut at it with darting rays of white flame. A few times she severed it, with a blinding, sword-like ray of white. But always the broken ends joined, and the endless serpent of crimson fire struck at her again.

"My God!" Eric groaned beside me. "It's devilish! What can she do—against that!"

His powerful body twitched, as if in pain, each time that the red tentacle struck at Sharothon. He was breathing heavily; his mighty muscles were knotted. His face was white, and there were little glistening beads of sweat upon it.

In a moment, I knew that Sharothon had lost the battle.

The striking tongue of scarlet luminosity penetrated through the bright violet mist, to her body. Her whole form was suddenly contorted, as if in agony—it was twisted as if squeezed in the relentless hand of an invisible giant.

During that moment, the red tentacle struck again, coiled itself about her body. She seemed held powerless in its grasp.

I saw her make a little futile gesture—of surrender!

The sinister streamer of writhing red light was abruptly withdrawn from about her—it retreated into the ebon cloud that shrouded Kerak. And that black mist melted away. The huge form of the black-clad man was revealed, floating free in space.

Sharothon touched her girdle again, and the violet light about her dimmed to a paleness that was almost invisible.

UPON the cold, harsh face of Kerak was a sneering smile of triumph. His pale eyes shone with a chill, mocking light. With an imperious gesture, he commanded Sharothon to come to him.

Slowly, the glorious being swam toward him through the black and empty void, driven by irregular spurts of the thrusting flame from the emerald staff. When she was near enough, he seized her white shoulder with a great hand, drew her roughly to him.

Holding her slim body beside him, with a huge arm about her shoulders, he leered down for an intolerable moment into her white, impassive face.

Beside me, Eric ground his teeth. His fingers twitched.

"If we could only get out there!" he muttered. "Just looking on—"

Slowly, with another taunting leer at Sharothon, Kerak lifted his jet-black rod, pointed it toward the rocket. A pale, almost invisible beam of electric blue came from it.

Suddenly the outer walls of the rocket, and even the exposed surfaces of the quartz windows, glowed with intense blue flame—with a chill, pure light of cyanic blue. Kerak and Sharothon were only dimly visible through the blue fire which covered the crystal panel through which we watched them.

Still, we saw something amazing—heart-breaking.

The lovely girl suddenly shrugged, as if yielding complete victory to Kerak. She smiled flashingly up at him—while Eric, beside me, cursed under his breath.

Then she raised her emerald rod, beside the black staff of Kerak.

White flame jetted from it, toward the rocket!

Then the blue light outside the windows became so dazzlingly brilliant that we could see nothing. Cold flame of sapphires seemed even to enter the rocket, to bathe the two of us.

Staring in astonishment at Eric, I saw his powerful body mantled in a nimbus of intense azure light, much like the violet radiance which surrounded Sharothon. And I was aware that there was a similar condensation about me—blue luminosity seemed to flow like a liquid over my body, to drip from my fingers.

"Hell, what's happening?" Eric burst out. "Kerak's sweet revenge, I guess. I wouldn't mind it so much, if Sharothon—if she weren't helping him!"

Black despair was in his voice.

I expected death. But thought of dying had become no stranger to me in the strange and terrible days since we had left Earth. I was frightened, of course. My heart was pounding, and I was breathing quite rapidly. But I was still enough master of myself to take a keen interest in the manner of my passing.

The Rocket Is Melting

AND, like Eric, I regretted more than anything else that Sharothon had smiled at Kerak, submitted to his embrace, and raised her weapon along with his.

"The rocket is melting!"

Eric cried it out suddenly. There was more of hurt, dazed surprise than of terror in his voice. I could say nothing. I was staggered, bewildered, helpless.

But I saw that the blinding blue luminosity seemed to be consuming the rocket. Great, ragged holes were coming in the metal plates, on the side next Kerak and the girl. Patches of black, star-gemmed space were visible, where metal had been.

The jagged, irregular edges of the plates retreated swiftly, apparently consumed by the intense, cyanic blue radiance that bathed them. The instruments, and other small objects within the dome, were flashing suddenly into azure radiance, vanishing—annihilated!

Of course, all the air within the rocket must have rushed out into space as soon as the first hole came in the shell. But, in my fear and bewilderment, that did not occur to me. I did not find time to wonder, until afterward, that I still lived, still breathed.

I had expected quick death, had prayed it would not be too painful. I felt a sort of mute surprise, as objects about me continued to dissolve beneath that blue flame, and I felt no pain.

In a very few minutes the last fragment of the rocket's metal hull was disintegrated. A sort of ash seemed to have been formed by the consumed metal. A cloud of fine, blue-gray dust was swirling about me, hiding Kerak and Sharothon from my view, and completely obscuring the flaming wonders of space all around us.

And Eric was floating beside me, unharmed. At the moment, it did not seem very strange to me. It was only later that the full wonder of it burst upon my slowly gathering senses.

For long moments we floated there, swimming free in the cloud of blue dust, which was brilliant with the reflected light of the blinding sun of the void. The last flaming fragment of the rocket had been annihilated.

Eric, drifting beside me, moved suddenly, pointed. And his words came to me curiously.

"Look, they are going away! We've got the sack! I didn't think she would treat us this way!"

Through a new rift in the swiftly dissipating cloud of blue-gray dust, I saw what he had seen. And the sight brought me black, utter despair.

Kerak and Sharothon!

Their arms were entwined. The violet *nimbus* of the girl was mingled with the purplish *aura* that surrounded the man. Together, they were leaving us. They drove upward, across the spangled blackness of the cosmic void. They dwindled . . . became a single fleck of pale light drifting athwart the cold, still stars . . .

Vanished.

CHAPTER V

Yothanda, City of the Void

"GOSH, Higdon, why aren't we dead?"

Eric's sudden query was startling. It brought me to realization of the fact that we were floating about in space, beyond all trace of breathable atmosphere, where our tissues should be robbed of moisture by the universal vacuum, and frozen, by unchecked radiation, into masses harder than steel.

But I was still breathing pure air, I discovered, and had been unconsciously doing so all the time since the strange destruction of the rocket. And I was still comfortably warm.

I twisted my body, brought a hand up before my face. And then, for the first time, I discovered that I was miraculously clad in a garment of some smooth, transparent, elastic substance. It was almost invisible, but it glistened faintly in the light of the strange and blinding sun that burned supernally, hanging between majestic wings of flame, far-off in the void.

"I have something on!" I called excitedly to Eric. "A sort of suit. Made of something like flexible glass. But how the deuce did it get on me?

Incredulously, he twisted his head, looked down at his body, rubbed his hands together.

And looking closely, I could see a transparent envelope about his body, outside his wrinkled garments. A loose, elastic covering. There was a crystal-clear cylinder about his head, in which were mounted, at the back, twin cubes of milky white, with a spiral tube between them. They must have been the means of revitalizing the air we breathed.

"Yes," came Eric's cry. "I feel the thing about me. And I can see yours. Sharothon—" He paused a moment, and then finished excitedly,

"Sharothon materialized these things on us, to protect us. When she was pretending to help Kerak wreck the rocket. Drew them from the energy she called *ytlan*, just as she did the little thought-transmitters! And I thought that she—"

"And it is the thought-instruments that enable us to talk," I remarked. "It has just occurred to me that I cannot actually hear your voice, though at first it almost seemed that I did."

"Of course. And Sharothon must be *some* scientist! Condensing these suits out of pure energy, with us inside them—and without our knowing what she was doing! Think of it!

"And it was one clever trick," he went on, "that she put over on Kerak! A great girl, Sharothon!"

I admitted that she was.

"And soon she will be coming back!"

Already the blue-gray cloud, which must have hidden us from the eyes of Kerak, had dissipated into the airless void—vanished. We hung in infinite emptiness. In every direction stretched the striking panorama of cosmic space. The cold, motionless, many-colored stars, hung against utter blackness. The huge, mistily green, lovely sphere of the earth. The cold, harshly brilliant argent moon. The blinding, white-winged eye of the sun, surrounded with writhing red prominences. The hazy, softly white paths of the Galaxy, and of the Zodiacal Light.

It gave me a throbbing ache of unutterable loneliness to realize the unthinkable vastness of the void abyss in

which we hung. Even conversation with Eric, who hung still beside me, brought scant relief—he would talk of nothing save Sharothon, and when she might come back, and what she might do for us.

It seems strange to confess it. But at last even the incredible wonder of the cosmic universe, and the poignant loneliness the sight of it gave me, and my eager expectation of Sharothon's return, could keep me awake no longer. It seems astounding, but I went to sleep, floating there in the universal gulf.

"Hey, Higdon!" Eric roused me. "Do I have to throw the moon at you to wake you up? You'd sleep through the Judgment Day! Sharothon has come, to take us to Yothanda!"

I stretched myself, reluctantly opened my eyes, to find the lovely girl swimming up beside us, in her nimbus of pale violet. She still wore the green tunic, or a similar one. Still she had the silvery girdle and the green staff. She was smiling, and a great and eager light filled her candid blue eyes.

"Great work, the way you put that one over on Kerak!" Eric called to her—even when we were using the thought-transformers, we always spoke naturally, though, of course, the actual sound of our voices did not penetrate beyond our insulating suits.

"Yes, I tricked him," came the thought-forms of the girl. "But no chance will I have to do so again—if he discovers that you still live. Then he will be angry indeed! And the danger is not small—if I try to take you to the hiding place I have ready, in the city of Yothanda.

"I could not save you so easily, again. If you fear death, it is perhaps better that I set you back upon your own earth. There you can live out your lives as though I and my people had not been—"

"Nothing doing!" Eric broke in. "We stick to the bitter end, and take whatever risks come in the line of duty! Eh, Higdon?"

He looked at me. I nodded.

A flood of joy seemed to pour into Sharothon. She smiled dazzlingly. Her glorious eyes flashed eagerly. She floated up to Eric, put a slender arm about his shoulders, drew him into the violet radiance that clothed her.

"I am glad. Glad!" Her thought-images seemed almost a song. "To Yothanda we go, to take our risks together! And not again will I speak of giving you up. For a great light would have gone from my life, had you chosen to return!

"Higdon," she addressed me as Eric always did, by the last name, "put your arm about me, with Eric's and we start toward Yothanda."

She reached out an arm, caught my hand, drew me to her. I put one arm about her slender shoulders, beside Eric's. I watched her tapering, white fingers play over the silver keys upon the upper end of the emerald crystal rod. Thrusting white flame jetted from it, downward.

And we plunged upward through space.

WHILE I have no way of estimating our speed, I know that earth and moon dwindled rapidly behind us, and drew together. Our velocity must have been far above that attained by the rocket in which we had left the earth. I felt, however, none of the crushing effect of acceleration that I had experienced upon the rocket. The power that moved us must have been applied to our bodies in a way yet unknown to terrestrial science.

Very soon, it seemed, came Sharothon's announcement, "Before us lies Yothanda!"

I searched the spangled blackness ahead and saw—Yothanda, the City of the Void!

A many-faceted gem of rose quartz, floating in splendid Orion.

In form, it was a polyhedron of curious shape, bounded by many smooth surfaces of roseate radiance. A many-sided jewel of rosy light, translucent and luminous.

At first, it was tiny among the stars. But it expanded Titanically as we drove toward it—the diameter of the space enclosed by those brilliant rosy walls must have been tens or hundreds of thousands of miles.

In minutes, it was looming ahead of us like a plane-faced planet of coralline light. Then, queerly, it seemed to swing abruptly *beneath* us; and we were dropping swiftly toward it.

"The Portal!" Sharothon announced.

We had reached a rosy facet, were suddenly standing upon a level, polished surface, which was like a plate of pink glass, and seemed to extend illimitably in all directions. We must have been held to it by some force of artificial gravity, generated by the mechanism of Sharothon's marvelous girdle, for we were able to stand upright, and to walk.

Before us, quite near, a circle of gigantic purple pillars—like colossal shafts of amethyst, unflawed and crystal-clear—leapt up from the rosy floor. They supported a Titanic golden disk, which must have been miles in diameter.

The Portal, Sharothon had said. Suddenly it came to me that, within the circle of mighty pillars of transparent purple brilliance, beneath the enormous yellow disk, was the entrance—to Yothanda!

As we stood there on the level rosy surface, staring in wonder at the Cyclopean majesty of the Portal, Sharothon slipped from our arms. Her fingers fell to the silvery girdle, ran deliberately over the ruby studs.

"Now I must change our bodies in a certain way," she informed us. "I must generate a ray which will alter our tissues, by photo-chemical means, so that they will not absorb light, or reflect it, or refract it. Thus we will be invisible.

"There are watchers within the Portal, set to enforce the law which forbids our people to come out. To make us invisible is not easy—it is a new art, and one not fully perfected, nor known to many. There is pain in it, and danger. But only so can we pass the watchers, and go unseen through the city's throngs to the hiding place I have ready."

Suddenly I felt a sensation of burning heat, of blistering radiation beating against all my body. I could not help flinching, crying out.

"Try to bear it," Sharothon pleaded. "Painful it is—the effect of light passing through the transparent body. And dangerous, if it be long continued. But there is no way to avoid it."

Still her fingers moved over the ruby projections on the silver girdle. Suddenly, watching her, I saw her become unreal—misty. A vague, gray shadow. Then she was transparent. The Titanic pillars of the Portal were visible through her body.

Startled, despite the explanation she had given of what she was about to do, I looked about for Eric. He, too, was gone. I looked down for my own body.

I was invisible!

I had a curious and most uncomfortable feeling that my body had ceased to exist, that I was a disembodied entity, floating alone in space. I felt of myself, anxiously.

"Damned queer feeling, isn't it?" Eric's comment was infinitely reassuring.

"Put your arms about me again," came from Sharothon. "And we will enter. We must go quickly, or the rays will destroy us!"

It brought me vast relief to feel her body against me, outside the flexible, transparent suit that she had materialized about me.

At once, the rosy surface dropped beneath us. We floated toward the colossal purple pillars of the Portal. Then, within the vast ring they formed, beneath the huge golden disk, I saw a broad, circular opening.

The gate to—Yothanda!

The burning pain of the invisibility rays still throbbed almost unendurably from all my body. But I was able half to forget it, in my wonder at the incredible city into which we were slipping, unseen, past dangers that I could not imagine.

Yothanda is a wonderful place. Its description is the supreme test which I must face in the writing of this narrative.

Suppose that the five-year-old child of an Australian blackfellow should be picked up from the bush in an airplane, carried directly to New York City, allowed to live a week among the wonders he would find there, and then dropped back into his native desert. He would have had an experience very interesting to him. But he would face vast difficulties in giving the rest of his tribe any idea of his experience. I face a similar difficulty in any description of Yothanda.

We dropped, invisible, through the Portal, safely passed the watchers, into the world of wonder within the rosy shell.

Vast distances. Unbelieveable vistas of light and color. Cyclopean columns of pure, frozen *light;* Titanic pillars aglow with the fires of unknown gems. Gigantic disks and spheres and cylinders of polychromatic luminosity, spinning in regular courses, planet-like, through infinite open spaces.

In Yothanda, there is no *up,* or *down!*

To be sure, there are vast flat areas, some of them many thousands of square miles in extent. I might call them floors. Vast columns and carved arches and flaming spires, gem-bright, gem-hued towers, and fluted domes rise from them. Majestic fountains of liquid flame, breaking into glittering drops that are like rubies and emeralds and sapphires and multi-colored diamonds, spray up from them. Upon them are whole cities of fantastic, lovely buildings, and gigantic statues that glow with the colors of life, and elfin forests that seem fashioned of frozen lights of jewels.

The people of Yothanda sometimes hold themselves to those floors with artificial gravity, and walk upon them as we do upon the earth—though more often they drift through the empty space above them, driven by the thrusting power of the *ytlan* rods.

But those floors are arranged through that world of space at a hundred different angles, held in position with walls and pillars of light. Upon those walls and pillars are strange and exotic carvings, or bright, stereoscopic pictures which change and move continually, portraying the history and the deathless romance of the people of Yothanda.

As we were flying swiftly and unseen, through that bewildering city of wonder, Sharothon pointed out the noble lives, the great adventures, the mighty loves, the stern sacrifices depicted in those living pictures.

"And notice the throngs of my people," she went on, "among whom we are passing. You see some few that toil upon a work of art—merely to record a great deed of an olden time. Some few that float alone, in silent meditation—probably thinking out vain and futile sophistries. Or dreaming idle dreams.

"But most, you see, do not even do so much. Watch them! Swimming in twos and threes. Men and women embraced. With thought for nothing but pleasure, seeking idle delights in one another, without the consecration of love. What good do they bring into being? Not even new lives, save reluctantly, at the command of the Nine!

"How different were the great days of old, when our mighty fathers came from the shattered fragment of a broken planet, to wrest life from a hostile void!"

SWIFT and unseen, we drove among the careless throngs—numberless millions—whom Sharothon eyed with such hearty scorn. Through vast arches gorgeously splendid as if cut from flawless gems large as worlds, into new scenes of untold wonder. Among carved and glowing cubes and spheres and cylinders and other shapes of frozen light, that spun in fixed orbits, among Cyclopean columns, and incredibly magnificent fountains of colored flame.

But mine is not the power to detail the wonder of it all. I can only suggest it, hint at it, and hope that the reader may glimpse some vague impression of the incredible glory of Yothanda.

Many times, in that world whose architecture was of motionless, frozen light, of the rigid, concentrate essence of pure color, I forgot that within it, as without, was the frigid, airless vacuum of space. It was hard for me to remember that any breach in the transparent envelope about me would be instantly fatal—that the air would rush out through any rent, that the moisture would be sucked away from my tissues, that I would quickly become a rigid mass, frozen iron-hard.

At last, when I was beginning to feel that I could no longer endure the burning, penetrating radiation to which the invisibility rays exposed my body, we flew swiftly toward the head of a marvelous statue, whose pedestal rose from a pool of liquid flame—of pure light, blue as the condensed rays of giant sapphires.

A remarkable statue, though not more so, perhaps, than a thousand others of which I had had fleeting glimpses, as we had swept through the crowded wonders of Yothanda.

Cyclopean—it must have been a full mile in height. It showed a man—a demigod, superb muscled—apparently hanging upon white, wide-spread wings. A golden shield was held before him, in one great hand. The other arm was flung back, to hurl a silver spear. Hot zest of battle was upon the handsome face; the hair was flung back by the wind.

"I made that." Sharothon told us. "Not yet is it finished, though I have toiled upon it since I was small. Not a great work, perhaps. But nobler than the idle joys of those millions you have seen.

"And I will hide you in the head of it. Space there is, for you to live there. And I can always be near you. Kerak watches me jealously—but how could he suspect

that I have you near me, as he watches me busy upon the statue?"

Swiftly we floated toward the gigantic head. Beneath the hair that flew behind it, and through a tiny, cleverly concealed opening, in the nape of the neck we entered. A fast, dim space—the head's interior—was about us.

I felt, again, a slight force of artificial gravity. And we were standing upon a smooth surface, in the base of the great head.

In the dim light, two ghostly figures appeared beside me, grew swiftly real. Eric and Sharothon, restored to visibility! They looked to be in a sorry plight. Eric was pale, trembling, reeling as if with fatigue. Sharothon, within her violet nimbus, looked white-faced and shaken.

I felt suddenly sick and dizzy. The burning radiation no longer beat upon my body. But every tissue of my being seemed aching, screaming for relaxation.

"We feel the effect of the force which made us unseen," came wearily from Sharothon. "It would soon destroy our bodies. We must have rest. Lie down, and feel that you are in security. There is no danger—unless Kerak finds us, which is unlikely . . . Unlikely, I hope!"

She reached a slender hand from the splendid violet radiance that bathed her body, touched me upon the forehead.

Her hand seemed to hurl me into an abyss of sleep.

CHAPTER VI

The Palace of Wonder

"WAKE up, Higdon, and give the once over to a palace out of fairyland!" Eric was shouting, shaking me roughly by the shoulder. My whole body seemed stiff and sore; I merely groaned. "Get up, man," he cried again. "You'd sleep through your own funeral! Sharothon has been busy with her little wand, while we slept. Just sneak a look at what she's made!"

At that, I struggled to a sitting position, and soon forgot the dull aches of my body in astonishment at the changes that the wondrous Lady of Light had made, while we slept, in the vast space that was the interior of the colossal statue's head.

To my astonishment, I found that I had been lying upon a luxuriously soft couch, covered with some exquisitely soft, dark-red material, resembling velvet. My transparent, flexible suit had been removed, while I slept, and also the soiled and wrinkled garments that I had worn since the rocket had left the earth. I was now clad in a soft, silk-like robe of vivid blue.

My couch was near the center of a long room, of oval shape. Its floor was of a smooth, pale-blue substance, resembling stone to the eye, but proving to be oddly soft and elastic to the step. The curving walls and the groined vaults of the ceiling looked to be of brightly red stone, curiously streaked and veined with gold and purple.

Set deep in the walls were several panels, upon which appeared strange moving pictures—similar to those amazing scenes of drama that I had already observed upon the Cyclopean inner walls of Yothanda. Pictures that were three-dimensional, vivid, *living!* A far cry from the distorted, flickering shadows of terrestrial "movies." Every scene had the balance and power of a supreme work of art. Amazing pictures, drawn from the vast history of Yothanda's people, and their far vaster store of imaginative literature.

The air within the room, just sufficiently cool to be invigorating, was laden with a softly delicate incense or perfume, infinitely delightful, and quite strange to me. Low strains of fine and exotic music came from somewhere. Soft rosy light, from a source that I did not see, bathed the wonderful chamber, broken into a thousand prismatic gleams of diamond light in a fountain that rose in many-colored drops and streams, near each end of the oval room.

Standing beside my couch were Eric and Sharothon—with arm linked in arm.

The girl was gloriously lovely. Her fine skin glowed with vitality—with a stronger life than is known on earth. She had exchanged her green tunic for one of shimmering rose. Still she wore the silvery girdle, and carried the emerald *ytlan* rod. Her glinting, sun-gold hair was massed in a new fashion, held to her head with a broad band of brilliant scarlet.

And her eyes, upon Eric, were softly and wondrously alight—with love.

Eric himself had draped his mighty form with a loose robe of intense blue, similar to my own—unless the change had been made before he woke. He looked, I thought, rather as I felt—weary, and stiff of muscle and joint. But he looked almost handsome, in his rugged strength. And his dark gray eyes were often upon Sharothon—aglow with a light akin to that in her own.

"There is artificial gravity in here?" I asked, noticing that they stood naturally upon the floor, and that my body seemed to be pressed against the couch with almost its usual weight.

Eric laughed queerly. "Higdon, you're a scream," he said. "A purple scream! If an angel came to see you, you'd make him step on the scales! You'd take his finger prints, and count the feathers in his left wing!" He turned to Sharothon, smiled into her eyes, and said, "But the poor fellow won't be happy until you satisfy his curiosity on a few technical points."

She looked at me, with friendship on her face, and her thought-message came to me—Eric and I still wore the blue disks of the thought-transformers; Sharothon and the other people of Yothanda needed no such instruments.

"Do not mind his jests, Higdon. You are a scientist, and my race, as well as yours, owes much to science. And the scientist must ever be a seeker of truth, an asker of questions and an answerer.

"Yes, we are held to the floor by an artificial field of gravitation. While you slept, I was busy, with the *ytlan* rod, sealing this space with a strong, insulating wall, which would hold the air which you need, and protect you from the chill of the void. I made rooms for you and Eric, air, food—all the things of which I knew, that you needed, or that might please you. Come, let me show it to you. Then we can bathe, and you may eat the food you need."

I could not repress a groan, as I got stiffly off the couch, and stood up.

"It is strange that your body and Eric's are so hurt," came from Sharothon. "It must be the effect of the invisibility. The effect of light rays upon the inner parts of the body that are never exposed to them. But you have both slept long—very long. I was sure that you would be recovered, as I am. But soon you will be better, I hope."

Arm in arm, she and Eric led the way to the end of the oval room. A panel slid quietly aside before us, and we stepped into another chamber, as amazing, and almost as lovely. I cannot take space to describe it all completely. But it was octagonal in shape, with walls of translucent emerald crystal, inlaid with harmonious and pleasing, though strange, designs in bright silver.

In the room's center was a broad pool, filled with a blue liquid, bright as azure flame. It was fed with eight tinkling little fountains of sapphire fluid.

"Let us bathe!" came Sharothon's thought-message.

I FOUND the bath singularly invigorating. I emerged from the brilliantly blue pool feeling new elasticity and exhilaration, and keenly hungry. My muscles, however, remained slightly sore. And when I was donning my blue robe again, I discovered inflamed and angry patches upon my skin.

"Now you may eat!"

Sharothon's lips did not move; no actual sound came from her. But the impression made upon my mind was almost exactly the same as if she had called out the words in an eager, vibrant, musical voice. It almost seemed to me as if she had really spoken.

She guided us through another silent, open passage, into a long and splendid room, paneled and ceilinged with broad smooth sheets of polished crystal, milky white, intensely scarlet, and jet-black. The effect of the gem-like walls was magnificent beyond imagination.

In the center of the floor was a table of ebon crystal, with three soft couches about it. Sharothon made us recline. She herself took the third couch.

With the emerald *ytlan* rod she "condensed" the dishes from pure cosmic energy, as we ate. A most spectacular service. A swirling globe of blue-white radiance would appear upon the table, and a platter of food or a flagon of crystal drink would remain when it vanished. It seemed almost magical. But Sharothon took it all as a matter of course, and insisted upon directing our attention to a panel at the end of the room, upon which were appearing astounding, living scenes from the early history of her race, portraying the destruction of the Lost Planet—a most striking cataclysm—and the ensuing struggle on the part of the survivors to maintain their existence in the void.

To describe the food is beyond me. It was infinitely varied in taste and color and form. There were sparkling liquids, and brilliant, translucent geometric solids. And delicately fashioned miniature images of various objects, so perfect that it seemed a crime to destroy them. Every item was delicious beyond the dreams of the veriest epicure.

Currents of cool, fresh air, subtly fragrant, breathed upon us. And we still heard an undertone of low, beautiful music.

Sharothon had prepared for us, or perhaps I should say for Eric, a palace that might have graced any fairy tale. She had left nothing lacking, for our joy or comfort. But she herself was the most perfect thing.

Sharothon—the lover!

But the meal was hardly ended when she told us suddenly that she must go.

"Kerak watches me jealously," came her regretful thought-images. "If I stay with you too long in this hiding place, he will suspect me, search, discover us together. Then his rage will be a fearful flame. By no simple trick will he be again evaded.

"Before I go, I will show you how to don quickly the transparent garments in which you may live in space. For your danger would be great indeed, should he come when I am gone, and break the walls to let the air you breathe escape!"

She took us into another marvelous room, where lay the wonderful suits, and showed us how to slip into them quickly through a long slit in the front, and how to seal that slit with a remarkable mechanism. Then we watched her slip out, through an air-lock similar to that in the top of the rocket—after a lingering, almost pathetic embrace from Eric.

All the wonders of that palace seemed hollow, dead, after Sharothon was gone. Only by effort could I concentrate my attention upon the marvelous, stereoscopic moving pictures upon the walls, showing as they did in colorful reality, the stupendous history of an amazing race, and the more stupendous dreams of that people's most gifted members.

Eric would do nothing but restlessly pace the floor of the room in which the entrance to the air-lock was situated, or talk to me incoherently of the beauty and nobility and kindness of Sharothon.

At last she returned—but it was only a few brief hours before she had to go again. Her manner revealed that she was suffering under a nervous strain, worried, afraid that Kerak would discover us.

When she was gone, I slept again. Eric was pacing the floor when I lay down, still tramping wearily and futilely when I woke.

Some time—weeks, I suppose—went by without decisive event. Sharothon was never with us long. There were short periods of feverish, almost delirious gaiety, when she was in the palace. And long, intolerable intervals of anxious, fearful waiting, when she was absent.

Contrary to our hopes, and to Sharothon's expectations, Eric's and my physical condition got rather worse than better. Our muscles remained sore; the red, inflamed areas upon our bodies increased in extent. We lost appetite, even for the delightful viands that Sharothon served so marvelously. Our heads ached almost continually, and both of us suffered frequently from nosebleed. Eric's mighty body wasted visibly, and I felt a depressing loss of strength and vigor.

Both of us minimized our symptoms, in discussing them with Sharothon, or tried to conceal them—for fear that she should think it necessary to send us back to the earth, to save our lives.

She was stricken with grief, and at a loss to account for the duration of our illness. She supposed it to be due to our adventure in invisibility. But she could not understand our failure to recover.

We had lived through weeks of despair and delight before the occurrence of the dread event which we had all feared and had been helpless to avoid.

Eric and I happened to be both gazing through the transparent inner valve of the air-lock. We saw Sharothon dart into it in mad haste. Her slender body was trembling in its nimbus of violet flame. Her face was white, her eyes wide with terror.

At once her thought-impulses reached us:

"Kerak comes! He has watched me, guessed our secret! With him he brings many of his evil, power-seeking companions. There is no hope to fight or escape. I fear much for all of us. But quickly don your suits, or your lives will be lost when they break the walls!"

Eric and I dashed into the next room, where our transparent suits lay ready, began scrambling desperately into them. In an instant Sharothon was with us, to help. It seemed a frightful time, though it must have been seconds only, before we had slipped into the flexible, air-tight garments and sealed the openings.

Then we waited.

Eric and Sharothon stood side by side, arms about each other's shoulders. Eric, in the transparent suit, still looked strong and aggressive, despite the slow and inexplicable wasting away of his mighty limbs. Sharothon, quiet within her violet *aura,* was white-faced, but defiant in manner. In the attitude of neither was there hint of surrender!

I stood near them, a little behind them.

Only a few seconds more of silence slipped past. Then a whole side of the splendid room—where there had been one of the marvelous, *living* pictures—burst into blue incandescence. The wall shone with a light of cyanic blue, as the walls of the rocket had shone when they were destroyed. And like the rocket, the wall melted away.

There was a sudden dull explosion. An abrupt rush of wind hurled us to the floor—the air in the room rushing out into void space.

Then, through the rudely burst opening flew a score of men.

Kerak led them, a powerful and evil figure.

His vast body was clad in black, with silver girdle. He bore a black *ytlan* rod. Purple fire bathed him. Upon his cold, hard face was a mocking sneer of malicious triumph.

Those with him were similar—but feebler copies of himself. Their tunics and their rods were also black. Upon their faces was the print of narrow selfishness. Now they were smiling in malevolent mockery.

Eric and Sharothon stood quietly, still embracing, as they burst into the room.

Through the thought-transmitter, I caught the substance of Kerak's challenge:

"Ah, my lovely Sharothon, you will answer to the Nine for this! And the sentimental senility of old Luroth will not save you again, as it did when he released you from the duty of bearing my child! Nor will it save these queer apes that you must have caught for pets in the jungles of some young planet—you, a daughter of Yothanda and legal mate of Kerak!"

Sharothon's face grew whiter. She bit a red lip. And the arm about Eric's shoulder tightened. But she made no reply.

Eric stepped forward a little, though still keeping one arm about the lovely girl. He shook a hard fist at Kerak.

Then the three of us were seized by many hands!

CHAPTER VII

The Judgment of the Nine

PART of our rude captors held us, there in the wreck of that splendid room of Sharothon's palace of love. And others pointed at us their black *ytlan* rods. I feared instant annihilation, by the incredible forces they drew from the Cosmic Ray. But my hands were drawn behind my back, as the palely scarlet rays flickered from the ebon rods.

When the feeble red rays went out, I found that my wrists and ankles were manacled with close-fitting fetters of a glistening, black, metallic substance. Unbreakable bonds, condensed upon me by the unbelievable power of the ray!

Eric and Sharothon, I saw, were similarly fettered. They had made no resistance. Their faces were impassive, save when they cast burning, desperate glances at each other. They seemed to scorn even to look at Kerak again.

"We take you before the Nine!" Kerak announced.

Each of the three of us was held between two of our captors, within the vague purple *auras* that mantled them. Driving white flame jetted from *ytlan* rods. We were whisked out through the vast, ragged hole that the ray had cut in the wall, outside the colossal statue's head.

Swiftly we drove through the wonders of strange Yothanda.

My dazed, bewildered and terrified mind retained but few impressions of that meteor flight. I have but vague recollections of darting through vast abysms of space, in which spheres and cubes and cylinders of pure, frozen flame spun, planet-like. Of flashing high over fantastic elfin cities, wrought of bright-hued gems, and strangely of skimming scintillant, flame-bright seas. Of flying past vast walls upon which living pictures moved. Of hurtling through innumerable rows of carved and fluted, translucent columns, many-colored, and so luminous they seemed formed of prisoned light.

About us swam and floated the careless, idle throngs of Yothanda's decadent race, for whose vain pleasure-seeking Sharothon held such contempt.

Then we swept through an arch of dully gleaming jet. Its opening was miles wide—Cyclopean. Beyond it, we drove through void upon void of sparkling, red-violet mist. Through vast gulfs of space, filled with glittering atoms of amethyst and ruby.

Then we stood in the Place of the Nine.

Beneath us was a crystal floor of sapphire blue. It seemed that one could see through yards upon yards of translucent, azure depth, beneath its polished surface. We stood between twin rows of square blue columns—monolithic pillars of intensely blue crystal, unbelievably Titanic.

Those colossal pillars of sapphire crystal must have been a hundred feet on a side. The distance across the unbroken floor of polished blue, between the two rows of columns, must have been fully half a mile. The pillars leapt up, sheer and straight, until they were lost in the red-purple, brilliant mist, which filled this strange space within Yothanda's core.

Beyond the azure pillars, above and in all directions, nothing was visible save the haze of glittering purple particles.

This Palace of the Nine was most astounding. It awed me with its inconceivable vastness. It slowed my heart with a sense of unknowable mystery, of the strange working of incredible forces.

Into the center of that Titanic, mist-shrouded hall of blue pillars, came—the Nine!

From the floor of sapphire crystal upon which we had lighted sprang up an amazing dome of pure white flame, prismatically brilliant. It was like a jetting fountain of vividly white radiance. A motionless dome of splendid, milky, opalescent light.

Within that wondrous fountain of soft, argent fire, the Nine—floated.

In the lower part of the splendrous dome, in various attitudes, four men and four women were swimming, drifting. They wore silvery girdles, studded with tiny ruby cylinders, like all the other people of Yothanda whom we had seen. Their silken tunics were vividly white. And they clasped *ytlan* rods of milky crystal. Each of the eight was evidently young, and all were handsome, in a cold, passionless sort of way. But their faces were usually loose, sensual, lacking in any apparent strength or nobility of character. Upon them was printed something of Kerak's cold intellectuality.

Above them, as if their leader, a stranger and more likeable figure was drifting free within the dome of white opalescence. An old man. His body was withered, shrunken, yellowed. His face was puckered with a thousand wrinkles. A purple garment was held against his meager frame by his silver belt. A hand that was but a gnarled claw gripped a *ytlan* rod that was purple as amethyst. His short, scanty hair was white.

But aged as he seemed, his eyes were singularly bright. Infinite wisdom was in their clear, twinkling brown depths—but mingled with the gay humor of youth. There was kindness in them, and tender understanding, as he looked down upon Sharothon and Eric and myself, from his high place in the opalescent dome.

I knew that he was Luroth, chief of the Nine, whom Sharothon had called a friend, because he had saved her from the lust of Kerak.

We had come to rest upon the blue crystal floor, near the base of that supernal fountain of milky flame, and were held to it by some slight force of artificial gravitation. The Nine had changed their positions in the white dome, looked down upon us expectantly.

Kerak stepped forward a little, toward the white flame, while his men kept their alert watch over the three of us. I saw Sharothon looking anxiously up at the aged figure of Luroth. Some message must have passed between them. Then I saw that the old man's brown eyes were troubled, and that hope seemed to flow out of Sharothon.

"Why must you drag Sharothon before the Nine?"

Luroth's brown eyes, with bitterness in them, were on Kerak, as my thought-transmitter caught this query.

A leering smile of triumph came again upon the cold hard features of Kerak. And his deliberate reply came to me:

"Because she is a willful criminal, who has broken many of the laws of the Nine and of Yothanda. Given to me by lot, which was conducted as the Nine ordered, she refused to accept her duty—and Luroth sustained her in her disobedience."

Kerak, I noticed, seemed to be ignoring Luroth, addressing his charge to the younger members of the Nine, who seemed more in sympathy with him. He went on, after a fleeting, sinister glance upward at the old man:

"Again she broke the law of Yothanda, and went beyond the Portal—through what evil power she evaded the watchers, I know not. In the jungles of the third planet, she found for mates these queer beasts you see beside her—prefering them to Kerak of the Black!

"Breaking another law of Yothanda, she brought them secretly into the city, hid them in a secret den of evil, where we caught them—together!

"Is this not matter enough for attention of the Nine?

"I demand that Sharothon be restrained, so that she will be unable to do such black deeds again. And that she be compelled to fulfill her obligation to me—according to the lot, and to the old original rule of the Nine.

"As for these brutes to which she seems to have chosen to mate herself, a painless death is good enough for them—the third planet is foul with such spawn; their fate matters little."

THE eight members of the Nine, who wore white, accepted this indictment with evident approval. Some of them nodded and looked at Kerak with expressions upon their cold, lax faces, of utter duplicity, then glanced sneeringly up at Luroth.

A shadow seemed to have fallen upon the bright-eyed oldster of the purple tunic and the purple *ytlan* staff. His face was solemn. There was regret, even pity, in it, when he looked down at the other members of the Nine, and at Kerak and his black-clad henchmen. And a kindly but sorrowful gleam came into his clear brown eyes, as he looked long at Sharothon and us beside her.

The lesser members of the Nine seemed to become restless; they stirred, looked questioningly up at Luroth, above them in the dome of shining opalescence, or shot glances of sinister meaning at Kerak. Luroth moved suddenly, addressed the girl."

"Sharothon you may answer this charge."

The lovely Sharothon hobbled forward a little in advance of our guard, shuffling slowly in her fetters. Her *ytlan* staff had been taken from her. The silver girdle she still wore, but her hands were fastened behind her back in such a manner that it was impossible for her to touch the ruby studs. Despite her bonds, she was still gloriously lovely. A slim, proud princess, her eyes of deep blue flashing with defiant scorn upon her captors. Her thought-images came swiftly:

"First, it is no crime that I have not born a child to Kerak, when the Nine itself has freed me from that odious task.

"It is true that I have broken a law, which I think foolish as it is ancient, that forbids me to leave the Portal of Yothanda. I can only say that the call of adventure, the love of life's joys, the impulse to explore the unknown, are forces stronger than any law man has made. Yothanda would be a thousand times greater if each of her people had broken that law.

And it is not true that I found these men upon the third planet. They had left it, in a crude machine they had built, to explore the wonders of the void. I found them not as jungle beasts, but as brave adventurers in the gulf in which we live—daring to conquer it as our fathers dared in ages past.

"Nor is it true to say that I have taken them for mates. Though," and she added it with a naïve and unhesitating frankness, "I do love Eric Locklin, as I could never love Kerak.

"I did break a law, in bringing them into Yothanda—because of love. Remember the great history of our fathers—all the brave and the noble things they did for love. For love—that seems dead in Yothanda, or degenerated into bestial lust.

"I can only ask the mercy of the Nine, for these men and for myself, in the name of those great lovers of history, who fought so desperately to conquer space for their loved ones, who built Yothanda.

"And if you can spare no mercy for me," she pleaded, "at least set these two men back upon their own planet. They, at least, are guilty of no crime save courage."

She shuffled back to Eric's side, among our guards. Their eyes met; they smiled bravely.

Once more Kerak stepped forward, almost arrogantly. His thought-forms were almost a command:

"I demand the judgment of the Nine!"

Luroth was looking down upon those beneath him in the fountain of white flame. He must have been conferring with them. His wrinkled face bore an expression of sad regret. They wore black, challenging looks of anger and scorn. Evidently there was discord in the Nine.

Suddenly the old man straightened to an erect position, and rose majestically to a higher position in the dome of milky opalescence. His brown eyes flashed, and the message came strongly and decisively from him:

"Such laws as men make should be merely a clarified interpretation of the laws of Nature, made to aid men to follow those higher laws. There are situations in which our laws should be tempered with justice of a tenderer kind, and with human understanding. In this case no stern enforcement of the law will contribute to anyone's happiness.

"This situation is above and beyond the laws that men have made.

"Sharothon, this lovely child of Yothanda, has said—and proved—that she loves Eric Locklin, a native of the third planet. And he has proved as well that he loves her. Their love faces an obstacle stronger than any law.

"You know that Sharothon, or any member of our race, cannot live upon the surface of the third planet. Because there she would be beyond the force of the *ytlan,* from which she draws the current of her life. Without it, she would soon droop and die.

"And these men, though Sharothon seems not to have realized it, can live no better in Yothanda. Their bodies are unused to the penetrating radiation of the *ytlan,* which is slowly consuming their tissues, wasting them away. They must soon be returned to their planet, or die."

I looked at Eric and Sharothon. Grief, and dazed horror, were in the girl's blue eyes. But Eric had managed to grin at her, even though he looked rather pale and shaken. I suppose that he was not greatly surprised, nor was I. We had feared something of the kind.

Now I understood the true cause of our weakness, and the soreness of our muscles, of our fever, dizziness and continual headache, of the inflamed patches upon our bodies and of their slow wasting away. It was not, as Sharothon had thought, the effect of our short period of invisibility. It was the all-prevading power of the Cosmic Ray, of the *ytlan,* beating endlessly through our bodies.

The *ytlan* was slowly killing us, and there was no escape but to return to the shelter of Earth's atmospheric blanket, where Sharothon could not live!

"Appeal to the law can do these three no good, nor bring them happiness. They have difficulty enough to face, in the laws of nature, without being hindered by those of man. They need aid from us, not crueler hardships against which to struggle.

"This is the judgment of the Nine—with which, unfortunately, they of the White do not agree:

"Sharothon shall be set free, and these men with her. They shall be permitted to leave Yothanda if they wish, and to solve their great problem in the best way they can."

Vast thankfulness filled me, and huge admiration for the courage and the goodness of Luroth. I turned and looked at Eric and Sharothon. They were staring at each other, faces transfigured with great joy. Then they looked gratefully up at Luroth.

But astonishment and anger were upon the faces of the eight who wore white, as well as upon the black-garbed followers of Kerak, who guarded us.

Kerak rushed forward toward the opalescent dome, his hard face black with rage. His thought-impulses burst out in an angry stream:

"It is time, and long has it been time, for change in the Nine. Shall Yothanda be ruled by a doting, sentimental fool? Shall justice be cast aside, and laws be broken with impunity?

"You of the White, who may choose or cast out your leader, have you no spines? Are you weaklings, to be ruled like children by a silly dotard? Can you not select a man to govern Yothanda?"

I hardly understood the gravity of what was taking place. I saw Luroth gazing down upon Kerak, at once stern and regretful. I watched the eight in white following Kerak, at first in surprise, then with evident approval.

Then abruptly, the eight raised their rods of milky crystal. Luroth was drawn down toward them, from his high place in the opalescent dome, as if by an invisible hand. And then he was flung from the fountain of white flame, to fall weakly on the floor of polished sapphire crystal, outside it.

He lay there, trembling, a heart-broken old man.

I seemed to catch the suggestion of a tear, upon his wrinkled cheek.

And the eight pointed their white rods toward Kerak.

They chose him to be leader of the Nine—ruler of the untold millions of Yothanda!

Spurning Luroth's quivering body with his foot, as he passed, he moved toward the edge of the opalescent fountain. Hands reached from the white flame, drew him within—from the sly and sinister glances I saw, I am sure the whole affair had been plotted in advance, the matter of Sharothon being a useful excuse for this strange and abrupt revolution.

The eight lifted Kerak above them. He floated where Luroth had been, high in the dome of white flame.

Soon came from him this mocking message:

"The Nine speaks again, and in better accord than before. Know my words upon this case. I cannot change the old ruling of the Nine, for that is sacred. But I can explain it."

He leered malevolently.

"The Nine judged that these three are free, and that they may leave Yothanda if they wish, to seek their happiness. That they may do. If Sharothon chooses, I must set her and her beasts upon the third planet.

"But mark this," and Kerak sneered mockingly. "No girdle of life, and no *yltan* rod, will be left with them upon the third planet—there was nothing in the judgment about that. If Sharothon chooses to live with the beast, she must live the life of the beast! And die the death!

"Or, if Sharothon does not choose to die upon the third planet with these jungle creatures, she may live on in Yothanda—if her pride will let her bear the child of the leader of the Nine.

And the men may still be set alive upon their jungle planet.

"Sharothon may choose!

"And Luroth may surrender to the Nine the purple *ytlan* rod that now is rightfully my own!"

CHAPTER VIII

Through Yothanda's Walls

SLOWLY, though with little apparent effort, Luroth got to his feet. His manner had somehow changed. No longer did he seem merely an aged and broken man. There was pride and determination in the way he straightened his shrunken body. Unconquerable spirit flashed anew in his bright eyes.

A strange scene, there in the mystic Place of the Nine, in the hidden heart of wondrous Yothanda!

The vast floor of polished sapphire crystal, with the twin rows of Cyclopean pillars of blue leaping up from it, to vanish in the sparkling infinity of bright purple mist that mantled this seat of mysterious power. The dome of milky opalescence, with Kerak floating high in it, in evil pride, with the eight in white below him. Eric and Sharothon, manacled, standing defiantly side by side, silently scornful of their captors. And aged Luroth, who had just been thrown from his place of strange power, getting slowly to his feet. . . .

"Don't show the white flag, little one," the thought-transmitter brought me Eric's whisper, which must have been meant for Sharothon alone. "Remember, you tricked him once!"

The girl smiled feebly, relaxed against his shoulder.

Then Luroth, who had been slowly lifting his purple *ytlan* rod, as though to give it up as Kerak had commanded, moved with astounding swiftness. He snapped the rod to a horizontal position, pointed it first at Sharothon, then at Eric, then at myself, with his claw-like fingers moving quickly over the staff's silver keys.

Sharothon and Eric were suddenly free! The black fetters upon their limbs had been broken, obliterated, by the invisible force that streamed from Luroth's purple staff. And my own manacles were gone!

An instant later, we were snatched up, as if by an invisible hand, from the azure floor. We were hurled away from the Place of the Nine, past the Titanic sapphire columns, into the brilliant void of purple haze.

In a moment we were floating—the lovely Sharothon, Eric, the aged Luroth and myself—alone in that vast space filled with the glittering purple mist. The gigantic blue columns of the Place of the Nine had vanished behind us. No solid object was visible. Nothing but the myriad twinkling atoms of frozen red-blue light.

"This is revolt against the Nine," Luroth assured us calmly. "And the penalty, for me, is death—extinction."

As he spoke, his fingers were playing over the levers upon his purple *ytlan* rod. And three identical objects took quick form before it, condensed from the fluid energy of the Cosmic Ray. Three small, glistening hemispheres of brilliantly transparent crystal, with black handles fastened to them, and little white levers.

Luroth snatched them to him, handed one to Sharothon, one to each of us from earth. He showed us how to grasp the black handles, with thumbs upon the white levers, holding the plane surfaces of the hemispheres from us.

"With these weapons," his calm, projected thoughts informed us, "you must hold them back until I can build a barrier within which we can be safe—safe for a little time, at least."

Once more he fell to manipulating the keys upon the *ytlan* rod. But no visible ray came from it, nor did I see any visible thing materialized before it.

Eric and Sharothon were drifting side by side, arm in arm.

"This is darn good of you!" Eric addressed Luroth, brokenly.

"They come!" Sharothon warned.

She pointed into the purple fog that surrounded us.

Then I saw a score of dark objects swimming up through it, toward us, swiftly yet warily. At first I could not understand what they might be. Then I realized that they were men, the henchmen of Kerak, shrouded in grim darkness as Kerak had been shrouded when he fought Sharothon outside the rocket. Kerak's men were rushing toward us across the abyss of purple mist!

I was still watching when a thin and wavering tenacle of red flame sprang from the nearest, struck toward us like a coiled snake, increasing astoundingly in length. An angry, whipping filament of crimson incandescence.

I saw Sharothon turn the flat face of her crystal hemisphere toward it, saw her small thumb press the white lever. A pink spark was born within the transparent crystal. It expanded, because a little swirling sphere of rosy light, its edges fading mistily. In an instant, it had shot from the crystal.

Still expanding swiftly, it darted toward that mass of inky mist from which the red tongue was striking. It became a crashing, hurtling ball of rose-flame, whose intensely brilliant core was almost scarlet. It struck that mass of darkness in which lurked a man.

Together rosy sphere and black mist vanished—annihilated!

"So good may come from evil," Luroth remarked, still busy with the keys upon his purple rod, "when the vibration-frames of such a man are broken down, dissolving his body again in the sea of cosmic energy."

In a moment the twisting, wavering, darting tentacles of scarlet flame had struck out from all the score or so of black clouds in which our enemies were hidden. Sharothon manipulated her crystal hemisphere again—and another crashing globe of coralline light went out through the purple mist upon its mission of obliteration.

Then Eric and I began using our own weapons. Our skill was, to say the least, indifferent. The first rosy spheres we formed went rushing away until they vanished in the glittering red-blue mist—perhaps to wreak havoc among the wonders of Yothanda. But several of that first group of attackers vanished beneath our fire. Twice one of the blood-red tongues struck perilously near us, but the quickness of Sharothon saved the day.

"More come!" the girl warned us abruptly. "Kerak has called aid from the city, into the sacred Place of the Nine!"

New black specks were hanging in the purple haze, swiftly growing. And this time, no mere score! They numbered hundreds! A wide space of purple was soon dotted with the inky clouds. Thin red streamers whipped out again.

"Forward the Light Brigade!" Eric muttered, sending a sphere of rosy radiance crashing out to meet the attackers.

In moments they were upon us. Sharothon, Eric, and I were using our marvelous weapons as rapidly as we could press the white levers. The clouds of blackness were vanishing swiftly—but not swiftly enough! Again and again the striking crimson tongues came near, until I was sure that one would soon seize us, as I had seen Sharothon seized, long before.

Again and again I sent out the rosy globes.

Then I saw a narrow scarlet tongue dart in, wrap itself around Eric's body. He writhed as though in agony. His gasping words came to me:

"Good-by—Sharothon—"

Abruptly, a blue wall was about us. We were within a sphere of shimmering, electric blue radiance. In the center of a marvelous bubble of sapphire light.

The crimson tentacle about Eric was cut off—it vanished. "Seems my farewell was a bit premature," Eric grinned.

In a few moments, score upon score of the twisting ribbons of crimson light were darting at us. But always they were stopped, hurled back by the strange, shimmering wall of electric blue that had appeared so suddenly about us. It protected us, as a heavy sphere of blue glass might protect its occupants from a den of striking cobras.

"The blue is a barrier of force, of vibration," Luroth informed us, "through which the weapons of our enemies cannot penetrate—not easily nor quickly, at least.

"Now we may attempt to leave Yothanda!"

ONCE more we were in swift flight, driven by the astonishing forces which Luroth controlled, through his sage knowledge, and through his possession of the purple rod, which, I think, was the most powerful *ytlan* staff in existence, though the black rods of Kerak and his followers were near it in power.

Through the glittering purple mist we drove, and out of it, through the Cyclopean arch of ebony. Then we were darting once more amid the strange wonders of Yothanda.

Over elfin cities of gems. Past incredible statues, and vast *living* pictures. Through dazzling fountains of liquid flame, and forests fashioned of unflawed jewels. Among splendrous arches and columns, walls and floating, spinning shapes of pure, many-colored light, imprisoned in solid form. Above wonder-crested seas of liquid fire.

The myriads of Yothanda rose against us!

Millions of black, tiny clouds of coiling inky vapor appeared before us, struck at us with slender crimson tentacles. But the strange wall of shimmering, unstable electric blue force was not broken. We burst onward through the opposing throngs.

Then we came upon the wall of Yothanda.

An endless, unbroken sheet of coral-colored crystal, like polished rose quartz. It stretched across before us, with the amazing columns and walls of the city's interior springing from it. Our hurtling flight slowed as we drew near it—and the attacking myriads thickened behind us.

Luroth pointed his purple staff at that rosy wall.

A circle of white incandescence appeared upon the coralline crystal, grew dazzling brilliant, seemed to cut through it. Abruptly it went out. And the circle was black. Black and shot with cold, motionless stars!

We drove through a hole in the rosy wall, out amid the strange wonders of interstellar space. I was glad to see the infinite abyss of darkness once more, sprinkled with the colored, unwinking points of stars, and dusted with the silvery powder of Galaxy and nebulas.

Yothanda dwindled behind us. Became a tiny, rosy gem, of many facets. Hung gleaming pink in the void, pale and dim beside flaming Canopus in Argo.

Safe!" I breathed, in vast relief.

"No," the projected thought of Luroth came swiftly. "Never safe, so near Yothanda. It is a matter of time alone until Kerak, with all the power of Yothanda at his command, will find means to break through this barrier of vibration, seize us, crush us!

"Our only safety is in flight. Flight to a far part of the universe, beyond all power or knowledge of Kerak or the people he now rules."

"Do you think we can get away?" Eric asked slowly. "Get to a place where Sharothon can live, and where we won't be killed by the Cosmic Ray?"

His dark gray eyes watched the old man's wrinkled face with an eager intentness that was almost pathetic.

"We can do no more than try," Luroth replied deliberately. "Your bodies cannot long survive the action of the *ytlan*. And Sharothon cannot live long without it. So, as matters stand, you cannot be much together.

"But our fathers, who came first into the void, suffered as you are suffering from the *ytlan*. And they found means to change their bodies—though only slowly, and through several generations—so that it no longer injured them. Perhaps, if we reach peace and safety, beyond the power of Kerak, I can do something to aid you. At least we can build an insulated chamber, to which you can retire for temporary shelter from the rays.

"But peace and safety are not yet ours. Kerak will not easily let us go. Battles are yet to be fought!

"Shall we construct a vessel, Sharothon, and fly? Or have you a better idea?"

"Let it be flight," came from the girl. And she added serenely, "For peace and health, for Eric Locklin and myself, away from the power of Kerak, I am willing to give all that I have, and am. But Luroth, it is wrong for you to take such risks, to aid us! You might have lived on in Yothanda, in peace."

"To work!" the old man commanded, brusquely.

Any very comprehensive description of the building of our ship of space is beyond my power. I did not completely understand even the mode of its propulsion, though Sharothon informed me that it utilized a pressure-producing radiation, akin to that of gravitation, which pervades all space. By interference and cancellation of waves, the pressure from one direction was eliminated, and the unbalanced pressure from the opposite direction propelled the ship at incredible velocities. By an arrangement which I failed to comprehend, the dangerous effects of acceleration were avoided.

After some difficulty, Luroth materialized or condensed from cosmic energy a second *ytlan* rod, for Sharothon, to replace the green staff which our captors had taken from her. He also made one each for Eric and myself. Ours, of a pale rose- or wine-colored crystal, were relatively weak affairs—there would have been danger in entrusting our unskilled hands with instruments even so powerful as the green rod of Sharothon.

Eric and I soon mastered the rudiments of control, which are simpler than might perhaps be imagined. Of course we were not able to fashion delicate instruments. But a large part of the vessel's hull was formed by our rays, while Sharothon and Kerak were busy with the weapons and the propulsive mechanism.

The building of the vessel took perhaps a week. Eric and I were compelled to pause, several times, for rest and sleep. Sharothon provided tanks of liquid food, within our transparent suits, which we could suck into our mouths through flexible tubes when we were hungry. The old man and the girl toiled continually.

Kerak's scouts, clad in the purple *auras*, or mantled in impenetrable darkness, were always visible outside the electric blue wall of vibration. Luroth assured us that our foes would soon find a way to penetrate the sheltering wall. But we saw nothing alarming.

Our ship took the shape of a sharp cone. Its color was a bright crimson. It seemed very small to me, used as I was to the colossal immensities of Yothanda. The diameter of the cone's base was no more than twenty feet, its height less than one hundred.

The propulsive apparatus was situated in the base of the cone—which, to my surprise, was the bow. The controls, and our living quarters, were to be in the central part. And the weapon, which Luroth designed very carefully, was mounted behind, at the vertex or point of the cone.

As the cone-ship neared completion, Kerak, by some means (probably by the physical amplification and projection of thought, by the use of some device similar to the thought-transmitters which Eric and I had worn since we left the rocket) got into mental contact with Luroth. I was able to pick up his message:

"Your foolish attempt to evade the power of myself, and of the Nine, and of Yothanda, has no chance of success. I am gathering all the resources at my command to use against you, to crush the screen of force behind which you have taken shelter, or to pursue you beyond the galactic system!

"Surrender now, and these terms you may have:

"You, Luroth, may be pardoned for the treason you have done, and live a free man in Yothanda.

"Sharothon need only obey the edict of the Nine, and present me an heir to my greatness.

"And the beasts with you, if you wish, may be set alive in the jungles of their own planet."

"And what if I refuse?" Luroth sent the calm query.

"Then you die as a traitor when you are taken—as you are certain to be!"

"If that is all," Luroth replied, almost serenely, "then I refuse!"

CHAPTER IX

The Hegira in the Crimson Cone

THE space which we occupied within the cone-ship was quite small, circular, and not above twelve feet in diameter. The floor was toward the stern, a slight force of artificial gravity holding us to it, to facilitate movement. The aspect of space ahead was reproduced upon the room's curved roof by an ingenious system of periscopic screens. The little chamber was crowded with an almost incomprehensible and quite indescribable array of apparatus—the controls of weapons, of the propulsive and steering mechanisms.

"So long, little universe!" Eric muttered, when the four of us were crowded into the little bridge, ready to begin the flight.

Luroth began manipulating the score of little colored wheels or dials by which the motion of the cone-ship was controlled. A low musical vibration, a faint singing or humming sound of a curious and indescribable timbre, came from the apparatus above our heads—air had been liberated within the ship, for the benefit of Eric and myself, making sound audible.

That curious sound grew slowly higher in pitch, but still I felt no sensation of motion.

"Wonder when we start?" I addressed Eric.

Silently, he pointed at the screen on which appeared the view to the stern of the cone-ship. Familiar constellations were visible there—Andromeda, with the hazy patch of its great nebula; Perseus, with its magnificent double cluster; part of the great square of Pegasus. But creeping among those constellations, moving slowly toward the center of the screen—was a new star!

A bright, yellow-white star. It faded, grew swiftly dim. I lost it among the unwinking myriads of space. Puzzled, I turned to Eric.

"What was that? A comet—"

He grinned at me. "Don't you realize it? That was the sun—our sun!"

"Yes," Sharothon assured me, "our sun is already so far behind that we could never pick it out with unaided vision."

"Then we must be safe—"

"I wish we were." She smiled sadly. "Kerak now commands all Yothanda's might. The arm of his power is long!"

She smiled at Eric, and they sat down together, at the side of the tiny, crowded room.

I am unable to judge the duration of our flight. In fact, time almost ceases to have meaning, to observers moving at such terrific velocities as we attained. Curious problems in relativity are encountered in the consideration of such rates of speed. Any discussion of them is quite beyond the scope of this narrative; the interested scientific student must be referred to the writings of Lorentz, Fitzgerald, Einstein, Eddington, Jeans, and others, or to such popular expositions of relativity as that by Mills—and the little I learned of the vast science of Yothanda impels me to warn the student that these, our greatest thinkers, are but stumbling blindly after the light of truth, with a long way of darkness yet before them.

Eric and I did not sleep, during the whole of our flight. Nor did we more than taste the food Sharothon had prepared for us. We were neither hungry nor sleepy. Yet the time that passed, measured by errestrial standards, must have been several months. The problem is much too complex to consider here.

Luroth taught me how to keep the cone-ship upon her course. A little circle of colored light, moving across the screens upon which the wonders of space were visible, showed the direction of flight; and our rate of speed was indicated by the color, violet denoting the highest velocity. Very slight motions of the little wheels sufficed to keep us upon the chosen course.

And Sharothon instructed Eric in operating the great weapon which took up the entire rear part of the vessel. Its control, being partly automatic, was not beyond Eric's ability. Luroth and Sharothon apparently wished to be free to meet unforeseen emergencies in the contest which they appeared to expect.

It seemed very soon to me—though, as I said, ordinary standards of time cannot be applied to the interval—that the stars thinned before us, thickened into clouds of silvery haze behind.

Past the last flashing outposts of the Galaxy we darted, into the terrible and unbroken blackness of an incredible abyss—into the extra-galactic void!

Behind us the Galaxy—the island-universe of myriad clustered suns among which our own is one of the smaller—became a vague and dwindling elliptic patch of light—a tiny fleck of misty white, appearing much the

same as the Andromeda nebula appears in a telescope of moderate power.

But for that speck of light—in which our earth and our sun were invisible atoms—and for a few other similar specks, that were other island-universes, the impenetrable blackness about us was unbroken.

We drove onward through the infinite darkness of the outer universe—through frozen and incredible night! So far from our own sun that its light, which could not have been distinguished by a telescope powerful as any on earth, would have been a million years and more in reaching us!

And even there, we were not beyond Yothanda's power!

Eric and I were incredulous when the first of our pursuers came within view—I could hardly believe that we had been followed so far and so swiftly. But Luroth and Sharothon seemed prepared for it. The old man accepted it in grim calm. The girl was white, tense, nervous; but she did not lose her head.

It was Sharothon who first saw the cube, pointed it out.

"The grasping hand of Kerak!" came her warning thought.

She stood pointing into the screen upon which was visible the rearward gulf of night-black, empty infinity. The pale, tiny fleck of white light, which our Galaxy had become, was visible there. And beside it was another object.

A cube. A cube of gleaming gold, with a small, round spot of glistening green, like an ominous green eye, in the center of each face. It seemed to float in the black and vacant cosmic behind us. But its size seemed slowly to increase.

It was exceeding even our incredible speed!

Sharothon stood for a long moment, staring into the screen. Her face was pale and drawn; dread was in her great, blue eyes. Strength seemed somehow drained from her slim, magnificent body, in its nimbus of pale, violet flame. She staggered a little, as if about to fall.

Eric, standing near her, reached out a strong arm. She collapsed in it, hung inert against his shoulder for a long instant. For the moment, he looked magnificently powerful, holding the limp form of the girl. I forgot that his mighty form was appallingly wasted, that his gray eyes were hollow and his face wan and grim. Forgot that he, like myself, was weak, dying, under the continual bombardment of the Cosmic Ray.

Then he heeled under Sharothon's weight—we were using nearly normal gravity in the cone-ship, because Eric and I found it more comfortable than a weightless condition. In a moment the girl seemed completely recovered, was half supporting Eric himself.

"Forgive my weakness," came her thought. "It is terrible to know that Kerak can reach us, even here! Will he follow us to the limits of the universe? Can there be no hope?" For a moment a look of bitter hopelessness was upon her lovely face. Then resolution flashed in her superb blue eyes. She added, "But whatever comes, I will not be weak again!"

Then wrinkled and emaciated old Luroth, who had been at the controls, broke in with the projected thought, "The cube is a machine Kerak has sent to run us down. I fear we will never escape. This cube we may destroy, but Yothanda has the power to build many of them for Kerak.

"Higdon, you may take my place, and drive the cone onward at the limit of our power. Eric, you may show how well you have learned to use the weapon. Sharothon and I must make certain preparations, for we may soon be battling with thousands of the cubes."

I WENT to the controls. Our vessel was already plunging forward at the highest speed of which it was capable. The musical note from the power generators had become so sharp and shrill that it was almost painful to the ear. But my task, involving only the occasional adjustment of the dials, was so simple that I was able to watch what went on about me.

Eric sprang to the board from which the weapon was operated, peered into a tube which resembled the ocular of a telescope, manipulated dials and levers.

Then, looking in a screen, I saw a misty-edged sphere of rosy light plunge backward from our craft. It resembled those obliterating globes of rose-flame which had been hurled from our crystal weapons, in the battle to escape from Yothanda. But it was many times huger. A vast sphere of coralline light, spinning dizzily about an intensely brilliant core of anger scarlet!

It drove backward through the midnight void, toward the golden cube with circular emerald "eyes."

The yellow cube, which had grown enormously larger since we first had seen it, moved swiftly sidewise, as if to avoid the crashing rosy globe. Writhing streamers of green flame—which appeared, except for the color, exactly like the amazing tentacles of crimson incandescence with which we had battled before—were thrust from the emerald circles on the sides of the cube. Wavering, snake-like ribbons of green light. They moved as if trying to catch the ball of rosy fire, push it back.

The sphere crashed through the green, tentacular streamers, touched the golden cube. Together, they—vanished!

The void was once more black and empty behind us.

Luroth and Sharothon were busy with their *ytlan* rods. The old man "condensed" two little handles of copper-colored metal which projected near the controls of Eric's weapon. Later, in the midst of tragedy, I learned their dread meaning.

When those were finished, he began building up, outside the hurtling cone, a shell of vibration similar to the one which had sheltered us while the ship was being constructed—a blue-screen of vibratory energy. The cosmic void seemed no longer utterly black; it became the deepest midnight blue.

Sharothon, at the same time, was busy with her emerald staff, making certain improvements in the cone-ship's mechanism. The shrill music of the generators suddenly rose to a higher pitch as she worked; I knew that we were moving faster.

Very soon another yellow cube was in view. Like a tiny golden die, hanging in the blue-black void, with one green spot in the center of each face.

It was destroyed by Eric's hurtling ball of rose-flame.

Then three cubes came into view, hanging together, linked by ribbons of emerald incandescence.

Each of the three was also obliterated.

Quickly, a group of eleven yellow cubes were within sight. A vast web of woven green streamers was flung between them—a net of emerald flame, spread for us!

Eric became very busy, peering into his shining tube, manipulating his instruments. He counted aloud, as the golden cubes vanished.

"One . . .two . . .three—no, so that's the trick, is it?

Well, that got you . . . five . . . six—a close shave for you, anyhow! . . . seven . . ."

Suddenly the cone-ship was drawn violently backward, with a sickening motion. The shrill song of the generators dropped many octaves, to a low note. I observed a dimming of Sharothon's violet *aura.*

"Hello!" Eric cried. "Something cut the juice off!"

Looking in the screens, I saw that one of the flexing, green filaments of tentacles of light had reached the cone from the nearest of the cubes, coiled itself about us.

Old Luroth sprang suddenly across the little room, seized the two copper-colored handles that he had just formed, projecting from the base of the weapon.

Eric hastily operated his levers and dials. Glancing into a screen, I saw another huge globe of roseate fire go crashing out. It obliterated the closest yellow cube. The green tentacle vanished from about us.

Abruptly the singing of the generators rose to its former shrill pitch. I almost felt the ship leap forward again. Sharothon's radiant nimbus brightened.

"Plenty of juice again," Eric reported. "What was the matter?"

"The green flame drew from about us the power of the *ytlan,* carried it to the cube." Luroth explained. "The green tongues exhaust the *ytlan* from the space about them. They hold great danger for us. For without the *ytlan,* we cannot move the ship, or use the weapon, or even maintain the zone of vibration which protects us."

"But the weapon worked when you took those handles," Eric said.

"Yes, but I was drawing upon a source of energy which would soon be exhausted," the old man said.

Even then, I did not suspect his heroism, his sacrifice.

ERIC had easily destroyed the three yellow cubes remaining of the eleven. For some time—as I explained, I cannot be accurate in stating time-intervals—no more appeared. I began to hope that we had distanced pursuit. I saw Eric and Sharothon exchange a quick glance of eager hope—and saw Luroth, intercepting it, sadly shake his head.

Then we made out another group of golden cubes, with a net of green woven between them, swimming behind us in the infinite void of blue darkness. Half a hundred, there must have been.

Eric went a little white when he saw them, set his jaw grimly, bent desperately over his instruments. A tremor shook Sharothon. Her eyes were wide and tragic. She ran to Eric, put a hand about his shoulder.

Luroth kept busy with his purple *ytlan* rod.

A full dozen of the yellow cubes were left, when we were caught in the emerald web. The cone was meshed in the living, writhing tentacles of green radiance. Again we were insulated from the Cosmic Rays which supplied our power.

The shrill music of the generators died again, became inaudible. The violet *aura* faded completely from about Sharothon's lovely, grief-shaken body. Again, the weapon refused to operate.

"No juice!" Eric called.

I glanced at Luroth. A strange look of doubt, indecision, was in his kind brown eyes. He looked uncertainly from the copper-colored handles, which he had grasped before to make the weapon operate, toward Eric and Sharothon. They were side by side at the controls. Eric was fumbling desperately with the levers; Sharothon had her white arms tenderly about him.

The old man's brown eyes suddenly kindled with a light of tender devotion. With a quick shrug of the shoulders, as if having decided upon an unalterable course of action, he sprang to the metal handles, took one of them in each hand.

"She percolates!" Eric muttered.

One by one, globes of rosy light drove back from the crimson cone, struck the golden cubes. One by one, the cubes were annihilated.

Paralyzed with horror, I watched a fearful and incredible change come over Luroth.

The old man shrunk, dwindled—as if his body were being sucked away!

His stature grew amazingly less, until he could hardly reach the handles, as he stood on the floor of the room. His limbs became dreadfully thin. He weakened, until it seemed as if it must take all his strength to cling to the handles.

For a little time, I watched that awful change in petrified silence. Then I started forward, to cry a warning to Eric. Just what was happening, I did not know—but I did know that in some way the operation of the weapon was destroying Luroth.

As I moved, the old man looked at me with stern brown eyes, from his shrinking face. His command came strongly to my mind:

"Silence!"

I stepped back.

"Two more!" I heard Eric's excited cry. "The last!"

But my eyes were riveted upon Luroth; I felt none of Eric's savage joy of victory.

For the fearfully shrunken figure of the old man had become suddenly transparent. It became a strange spectre of shimmering, ghostly radiance.

It vanished.

Luroth was gone—used up!

"Tally one more for us—" Eric was crying eagerly, as he turned. Then, in blank wonder, "Where's Luroth?"

"He shrank—as you fired the balls of light," I stammered. "He—faded. Gone."

I hardly realized that the song of the generators had risen again; that Sharothon's purple nimbus was restored.

The girl, after an abrupt, sharp look at the copper-hued handles, collapsed in a tragic heap against Eric's body. Her slender white shoulders were shaken with great sobs of abandoned grief. It seemed a long time before she had recovered sufficiently to explain what had happened.

"Luroth used up his body to save us—to feed the weapon. You know matter and energy are the same; either can be converted into the other. The green web cut us off, insulated us, from the *ytlan.* And Luroth dissolved his own body into energy, to penetrate the weapon.

"He used up his body. Gave it—for us!"

Again she broke into uncontrolled sobbing.

"Gee!" Eric muttered brokenly. "A great scout!"

I saw tears trickle across his drawn, white cheeks.

For a longer interval than before, we hurtled onward, alone in the void. I had hopes that Luroth had not made the supreme sacrifice in vain.

Then, with a little cry of heart-broken anguish, Eric pointed out upon the screen another cluster of the golden cubes. There must have been a hundred of them. A vast net of weaving streamers of green radiance was stretched between them.

Eric was soon furiously busy with the weapon. But he had made scant inroads upon the new horde before slender tentacles of emerald incandescence were twined about the cone. Once more we were dragged back, with generators dead, and with the violet radiance gone from Sharothon.

Again, the weapon refused to operate.

It gives me vast pride to say that I sprang forward, seized the metal handles at which Luroth had vanished. I feel that the act serves as a feeble excuse for my including myself in this history. I cannot say that I was unafraid, or that I moved without hesitation. And it may be that I am inclined to make too much of it. For what was life worth to me? An old man, an exile from his own universe, with none to love save those whom I might save by dying—how could I have done otherwise?

It was a futile gesture.

Nothing happened to me. Luroth had dwindled, faded, and vanished, together with his purple garment, his silver belt, and his purple *ytlan* rod, when he put his hands upon the copper-colored handles. But I might as well have crossed my thumbs, for any result. Perhaps I failed to perform some necessary preliminary act —I shall never know!

Nothing happened to me. The weapon still refused to function. The web of green flame grew tighter about us.

Eric and Sharothon were in each other's arms . . . silent . . . stricken with grief and the shadow of disaster . . . drinking the bittersweet cup of the last embrace . . .

Finally, I saw that the hazy, luminous patch, lying in an infinity of utter blackness, which was our Galaxy, was slowly growing larger. The green web which meshed us was drawing us back! Back to Yothanda and the evil might of Kerak!

Luroth had sacrificed himself in vain.

CHAPTER X

The Choice of Sharothon

PRESENTLY I lost consciousness. No definite impressions remain in my mind, of the remainder of the timeless period which I spent within the crimson cone. I think I was not actually asleep, however, for vague scraps of recollection come to me. Dim pictures of Eric and Sharothon, striving desperately to escape the pall of tragic gloom that seemed about to overwhelm them, laughing feverishly, struggling madly to be gay, drinking recklessly from the vessel of love so soon to be shattered. It seems, too, that I have faint memories of the aspect of the void, as the green web was dragging us back through the crowded suns of the Galaxy . . .

But I can find no faintest recollection of our arrival in Yothanda. By that time, my body was far gone in the dissolution caused by the action of the Cosmic Ray. I must have been completely insensible.

It seemed that I woke abruptly, to find myself standing in the strange and mystic Place of the Nine. Discovering myself there brought me a sense of wonder and dread which, for the time, sharpened my weakened faculties. Though I was far from feeling any sense of strength or well-being, I was clearly enough aware of my surroundings, master of myself again.

The Palace of the Nine—seat of mysterious and dread authority!

I was standing upon the vast floor of polished sapphire crystal. Far away from me, on each side, rose the twin lines of square, Cyclopean sapphire columns—leaping up incredibly, to lose themselves in purple haze. Beyond the vast blue pillars, overhead, all about me, nothing was visible save the fog of twinkling, sparkling purple atoms, which filled all this strange void, within the core of wondrous Yothanda.

The transparent suit, which Sharothon had so long before materialized upon my body to save my life, was still about me. A strong man, clad in a black tunic, and holding an ebon *ytlan* rod, was supporting me.

I turned weakly—all strength and vigor had long since ebbed from me—and saw Eric and Sharothon. They were beside me on the floor of azure crystal, held by men in black.

I was amazed, horror-stricken, at the change in Eric. His mighty body was emaciated until it seemed a mere animated skeleton, clothed in pale skin. His grim, haggard face was fearfully drawn. His gray eyes were dreadfully sunken and hollow, gleaming with a strange, feverish light.

One shrunken arm was about Sharothon's waist.

The girl's body was still lovely, in the shimmering rose-violet nimbus that flowed from her silvery girdle. But her face was pale, almost as haggard as Eric's. It was terrible to see the sorrow and desolation in her blue eyes, as they rested upon Eric's broken body with such unutterable longing.

"The Nine is in judgment upon you!"

Kerak's thought-forms burst upon my brain with the unpleasant, rasping power of a coarse and heavy voice. Weakly, I turned away from Eric and Sharothon, saw the Nine.

The splendid dome of milky, opalescent fire still rose from the floor of blue crystal. Nine figures were floating in it, at ease. Four men and four women, in white, holding white *ytlan* rods. Above them, purple-clad, but still with the black staff, was Kerak. His cold face regarded us with sneering satisfaction. Cold fire of evil victory was in his pale blue eyes.

"The penalty for revolt against the Nine is death," Kerak announced.

Sharothon and Eric looked up at him, with scorn in their eyes, quietly and impassively. If he expected them to plead for mercy, he was disappointed. For a little time his chill eyes watched them, then he continued:

"But Luroth, your leader, has already paid the penalty—and that I regret, for I would have administered it with my own *ytlan* rod, or with his own, had I taken it.

"And to the three of you, the Nine extends mercy."

He paused, and seemed to sneer at us, mockingly. A cold and ugly smile twisted his bleak face.

"To you, I grant mercy. Your revolt against the Nine is forgiven. And the first decree of the Nine—which Luroth uttered—I shall honor. For the words of the Nine are sacred." He smirked mockingly.

"The lives of the beasts are spared. They will be set back upon the third planet, at the point from which they set out upon their foolish attempt to navigate the void.

"And Sharohon—if she will—may go with them. That is the decree which Luroth rendered, and I will honor it. But no *ytlan* rod, and no girdle of life may she take with her. And I fear that her life would not be long, upon the third planet, without them.

"If Sharothon still values her life, if her reason has

not entirely departed since her infatuation with these curious jungle monsters, she may remain in Yothanda. She has only to give her word that she will never slip past the Portal again, and she may remain, to be companion to Kerak, leader of the Nine, and bear him an heir, that his great name may be perpetuated.

"Sharothon may choose."

His pale, cold blue eyes stared down upon Sharothon, from the splendrous dome of opalescent light in which he floated. The wan girl looked up at him, directly, impassively. Her reply was prompt:

"I choose to go with these men."

Black anger filled Kerak's pale eyes, twisted his face into a hideous mask.

"Then go. Die—as a beast!" His thought-forms seemed a snarl.

"You can't do that, dear!" Eric was objecting, turning abruptly to look in the girl's face. "You can't live beyond the *ytlan*—"

She looked soberly into his sunken, hollow eyes. And he was suddenly quiet.

WITH the knowledge that the noble girl was doomed —that she was bravely choosing death, weakness overwhelmed me. I felt abruptly sick and trembling. The dome of milky white in which the Nine floated, and the colossal azure pillars seemed to spin about me, until all was lost in the pressing fog of dancing purple notes.

Again there is a space of which I have only the vaguest and most unsatisfactory recollections. I can recall almost nothing of how we left Yothanda, or were set back on Earth.

My next definite memory is of waking up to find myself lying on a familiar bunk, in the old ranch house in New Mexico, where we had built the rocket. As I lifted myself weakly upon an elbow, staring about at the rude furnishings which I had not seen for so long that they seemed almost strange, I heard the well-known nasal voice of "Shorty Joe," one of my hands, singing doleful words to the effect that he would not see his mother when the work was completed on the following autumn. Accompanying the voice came a clatter of pans and tin plates. The window in the end of the room was open; a hot, white flood of sunlight poured through it, across the worn pine floor. A cool breeze blew into the room, laden with the fragrance of the white locust blooms, which hung amid the green foliage of the tree in view outside.

It was hard to realize it all. I was safely back on the earth, at the old ranch. Then Eric and Sharothon must be here, too! And I knew that the glorious girl could not live long, away from the cosmic radiation which had maintained her body, out in space.

Suddenly there was a clatter at the door, and Sharothon came silently into the room, and up to the bunk where I lay. My eyes searched her exquisite form eagerly.

She wore a strange, clinging garment of pure-white, silken fabric. The silvery girdle, which I was so used to seeing about her, was gone; nor did she carry the emerald *ytlan* rod. Her golden hair was bound to her lovely head with a wide black band. In one hand she carried very carefully a full bowl of fragrant, steaming broth—which had probably been prepared by "Shorty Joe."

"Eric—" I began the question.

"He is in the other room, beyond the hall. He says he will come in to see you, soon. He is getting strong very rapidly. He could sit up yesterday—"

"Yesterday?"

"Yes. It is four days since Kerak's men left us here. You and Eric were very weak. Shorty Joe helped me take care of you. You have been sleeping. But you will recover very quickly, now, since you are safe beyond the power of the *ytlan*."

"And you, Sharothon?" I asked eagerly. "How do you feel?"

"I am yet strong." Her blue eyes darkened suddenly, with the shadow of dread. She added quickly, "You must drink this broth. You need food."

She held the bowl with her slim white hands, while I sipped the hot fluid from it.

It seems strange to think that I had heard her sweet, clear voice only once before, when she had tried to imitate Eric's words, at our first meeting, in the wrecked rocket. She seemed to have learned English during the time we had been together. Her soft, golden voice was singularly pleasing.

When I had finished, she went out with the bowl—and a shadow fell upon the room with her going.

It was some time later that she and Eric came in together. He was still weak; several times she steadied his tottering steps with an arm about his waist. But I could see that his eyes were not so hollow as they had been, and that a healthy glow was returning to his skin.

"Welcome back to the land of the living, Higdon!" he greeted me, with his old smile. "Shorty Joe has been wanting to send for the undertaker, but Sharothon insisted you would pull through. You will probably be building another rocket, in a month!"

I knew that Eric was himself again.

On the second day following, Eric and I were able to walk about the yard with Sharothon. Within a week, he and I felt quite strong, though it was much longer, of course, before we had regained normal weight and vigor.

It was early in May, 1931, when we arrived at the ranch house—nearly eleven months after we took off in the rocket. The most of that time must be accounted for by the period we spent in the crimson cone, in that strange, timeless flight that led us beyond our galactic universe.

Through the rest of May, we lived on at the ranch, very simply. Shorty Joe and two more of the boys stayed about, to care for us as well as they could. One of them rode almost daily to the railroad, for supplies —it was difficult to find food which Sharothon could eat.

Slowly the wonderful girl grew weaker. Eric and I insisted that she go to some hospital, where she could have scientific attention, and the care of the greatest specialists. But she refused. Her only trouble, she said, was lack of the life-giving power of the *ytlan*. And no terrestrial specialist could give her that. She insisted that it would make her happier, just to stay at the old ranch, with Eric and myself. Yes, she included me; I shall always rejoice that she did.

She and Eric were together almost every hour of the day. During the first two weeks, after he was strong enough, they often walked in the sunshine about the yard and corrals, or out across the freshly verdant range. Once the three of us rode together, and Sharothon pronounced that striding a running pony was almost as thrilling as mounting through space with the power of her lost *ytlan* rod.

But after the second week she was unable to walk

or ride very much. She had to spend most of the time in bed. Beautiful she was still, though I thought she looked thin, and paler than she should have been. Eric cared for her with such devotion that I feared for his health, though I and the boys were always ready to do any service in our power.

One evening, about the end of the third week, Eric was sitting by Sharothon's bed, reading to her from a book of poems which she liked—Browning, I think. I had just come into the room with a glass of water; I was standing near the door, looking at the girl—her frail liveliness was very striking, as she lay beneath a clean white sheet, with her golden hair glistening against the pillow, with her bright blue eyes, gazing upon Eric from her thin, pallid face, filled with tender, hopeless, wistful longing.

The door was abruptly flung open behind me, and into the room strode—Kerak!

His powerful, white-skinned body was mantled in a splendid *aura* of purple light. He wore the purple tunic of the leader of the Nine, fastened to his waist with a ruby-studded silver girdle. He carried a black *ytlan* rod. His bleak face was set in hard determination; a strange light was flashing in his pale, cold blue eyes.

In one hand he carried an emerald staff, and a second silver belt—Sharothon's!

He held them out to the girl on the bed; his pale eyes were upon her. His communication with her was by thought alone, and since the little transmitters had been taken from Eric and me, along with our transparent suits, I did not receive it.

I watched Sharothon. She seemed to shrink back from Kerak. Suddenly she reached a slender white arm from beneath the sheet, grasped Eric's hand and drew him toward her.

"Hold me," she pleaded, in a small voice. "He wants to take me away. He says he will give me the rod and belt, if I will go with him—or leave me here with you, to die. And I am not going."

Eric gathered her slight form up in his arms, held her fiercely, close against his breast. Once he looked uncertainly toward the grim form of Kerak, as if about to speak. Sharothon shook her head; he closed his mouth, and clutched her more firmly.

Black rage was again upon Kerak's harsh face. Suddenly he flourished the green rod and the argent girdle before me, stepped quickly toward Eric and the girl. Sharothon shrank from him, clung to Eric.

Kerak turned abruptly, in the purple radiance that bathed him, rushed out of the room. . . .

As the days of the next week went by, Sharothon appeared to become steadily weaker. It was on one of the first evenings in June that Eric, white and trembling with grief, took me aside and whispered chokingly that he thought Sharothon was about to die.

With an aching heart, I went back with him into the room where she lay. She was very thin and pallid, and her glorious eyes were closed. Breathing in short gasps, with tears streaming down his face, Eric fell on his knees beside the bed, and put his arms very tenderly about her slight, motionless shoulders.

The scene was too painful for me to watch.

Assured that I could be of no service, I went out into the yard. An hour later I was pacing restlessly up and down in the darkness, among the black masses of the locust trees, glancing up, occasionally at the yellow-lit, curtained window behind which was taking place the last act of a tragic drama.

There was no moon, and the stars were bright. My grief-numbed mind was bringing up scattered recollections of our adventure in space.

Then I saw the ray. . . .

A slender pencil of rosy light. It shone upon the roof of the old house, apparently from some point in the constellation of Leo—in which, I knew, the city of Yothanda hung at that time.

A slim shaft of pure, coral-pink radiance. It was no more than a yard in diameter where it struck the roof. Above, it seemed to taper to a fine line of rosy incandescence, pointing toward splendid white Regulus.

For a moment I was dumbfounded, petrified with amazement.

Then, nerved to action by a chill of apprehension, I dashed for the front door, and raced down the hall, and into Sharothon's room.

The shaft of roseate radiance had cut a clean, round hole through roof and ceiling. It fell, a torrent of coralline flame, upon the bed where Sharothon had been.

And Sharothon was gone!

Eric was standing alone in the room, beside the bed. A queer expression was upon his haggard face. It was lined with weariness and grief, of course. There was wonder upon it, and something of fear. And in his gray eyes was a gleam of mad, incredulous *hope!*

He saw me, turned nervously.

'She's gone!" he blurted out. "The pink ray snatched her up! And I'm going, too! Drop in to see me some evening, Higdon."

With those swift words, he grasped my hand, squeezed it painfully. Then, as quickly, he released me, and leapt across the room, toward the rosy ray which fell upon the bed.

"Wait!" I gasped. "What—"

He had sprung upon the bed, full in the torrent of coralline light.

For a moment he stood there, a strange figure, bathed in rose-flame.

Then he was gone. . . .

An instant later, the ray went out. . . .

That is a month ago, now. I have spent the last three weeks in the writing of this narrative. The occupation has helped to keep me sane; and I feel a certain satisfaction from having recorded these incidents, though I am under no delusions as to how my work will be received.

I cannot honestly say that I expect ever to hear more from Eric and Sharothon. My reason tells me that the girl had died, that the ray was merely recovering her body so that it might receive appropriate rites, and that Eric's leap into the ray was a vain sacrifice of life.

But, if that is so, why the sudden, eager hope that I saw in his eyes, before he leapt?

THE END

The Romance of Posi and Nega

By Joe W. Skidmore

Author of "Dramatis Personae"

Prologue:

WITH a keen realization of my limitations, I have recorded the atomic adventures and emotions of Posi and Nega.

My pen is inspired by a profound and reverent wonder at the vastness of things—and the smallness of electrons, all whirling and moving in an incomprehensible but well-ordered scheme of life and motion.

My contemplative summation is that surely all this marvelous detail and motion is not a matter of mere chance or accident, but that it is all directed from the smallest electron, just beginning to glow from the life-giving cosmic rays, to the star a million times larger than the sun.

Consider you well, my reader, that the same Intelligence that directs and controls the orbital flight of the smallest electron holds the mightiest star-sphere in its timed and whirling circuit!

Posi and Nega, their adventures, their colloquial observations, are admittedly weird phantasy. But have electrons life? Who can safely make rebuttal? . . . *J. W. S.*

Illustrated by MOREY

POSI and Nega came into existence far out in the vast voids of space. Mothered they were by the cosmic rays of interstellar space; fathered by that mysterious energy that gives life and impulsion to electrons.

What mighty force, what vast intelligence dominates and actuates the Universe, even to the marvelous and intricate scheme of atoms and electrons? One cannot contemplate the composition of matter and tolerate atheistic thoughts.

All minds capable of cogent analysis are agreed that some infinite power governs the incredible rhythm of motion, and the infallible numerical composition of matter.

Posi came into being a positive electron, usually called a proton. Nega was created a negative electron. In the mysterious realms of space, where the fundamental bricks of the universe are made, the two were given life and finally met in a nucleus of helium gas. It required four protons and two electrons to make up the nucleus of helium. Then there were two orbital electrons, whirling around the nucleus. Nega was one of them.

When Nega made the first flashing revolution of her orbit around Posi, she fell madly in love with the radiant proton. Nega, the electron, was female; as it is in human life, the female of the species is negative, and the male positive.

Posi, charged with that infinite, unlimited, magnetic energy that filled his madly whirling being, was happy, and manlike sang a love song.

"Hello, lovely one," he vibrated as Nega circled swiftly like a planet around the sun.

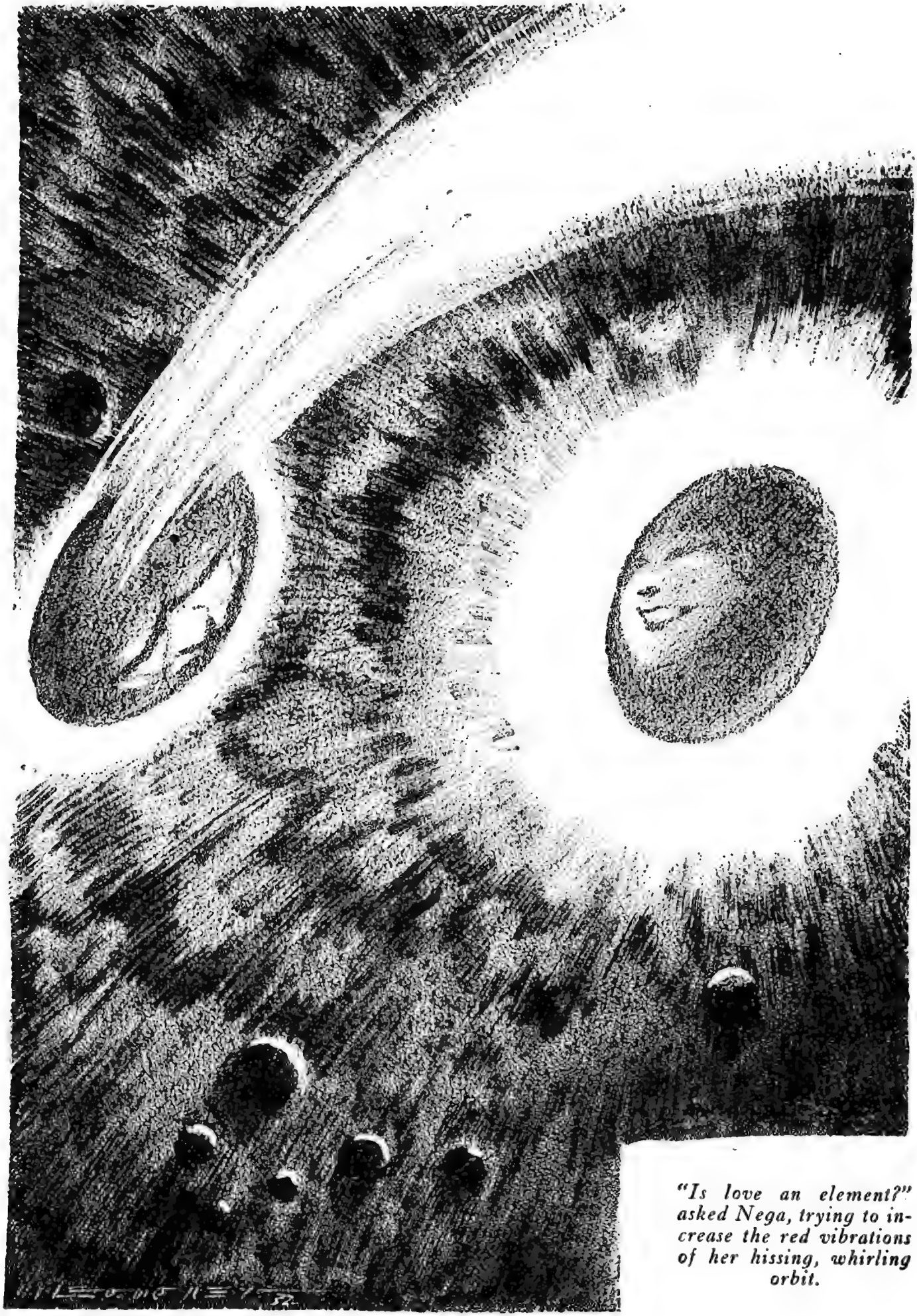
Nega's heart swelled, and the hissing song of her orbital flight was suddenly a crescendo melody of sentiment. Posi increased the power of his magnetic pull, and the orbit of Nega, confined within Posi's influence, decreased the slightest, and her incredible speed increased.

"I am Nega. Who are you?" she sibilated, when Posi's sudden influence relaxed, and she regained her breath.

Posi told Nega who he was and told her of the cosmic rays; that those rays are not all alike; that they are divided into several distinct bands, or groups of the spectrum.

Nega, feminine-like, pretended great admiration as Posi went on proudly and academically.

"You see, my beautiful Nega, cosmic rays are different in their wave lengths and radiations. Some rays are more penetrating and powerful than others. Each cosmic ray is a type or a band by itself. Each spectrum



"Is love an element?" asked Nega, trying to increase the red vibrations of her hissing, whirling orbit.

band corresponds to the production of a particular kind of atom."

"You mean us?" purred Nega, simulating great ignorance, that her lover might appear important, even as women have always done.

"Yes, radiant one," hummed Posi across the great distance that separated them; a distance as vast in relation to their respective sizes as the distance between the planets of our own human universe. "We are part of a nucleus of helium gas. We were born when a group of helium cosmic ray bands were released. Back of our atoms of helium are the atoms of hydrogen. The hydrogen atoms are the building stones of the physical universe. They are the lightest of any atoms, and the simplest in construction. Do you know, Nega, that hydrogen is the primary and simplest form that matter assumes? I'm glad we were not born in a hydrogen nucleus. We wouldn't have any company of friends."

"I wouldn't care if you were there," vibrated Nega, swinging coquettishly the slightest bit from her circling path.

Posi chuckled as his magnetic influence instantly pulled Nega to her true course.

"Careful," hissed Posi, who was thousands of years older than Nega. "You are young and untaught. You must never swing from your orbit. Of course, in this atom of helium, we have worlds of room or space, and any undue oscillation is not very dangerous."

"I can't see how it will hurt if I play a bit," whined Nega, glowing with a sudden violet color to best show her trim, round figure.

"Well," whistled Posi, "you are unsophisticated. Just suppose we were contained in a nucleus of radium. If we were, there would be two hundred and twenty-six protons like myself. There would be one hundred and thirty-eight electrons held in the nucleus by the protons, and eighty-eight would be free or orbital like yourself."

"How interesting," zipped Nega, "but what if I did deviate from my orbit, even if we're part of an atom of radium?"

"You ignorant child. Can't you see it would be much more crowded than we are now? If you oscillated from your orbit, you might collide with another electron and cause trouble. We're a little solar system of our own, and you are moving around the central nucleus billions of times every second."*

"Such a collision," continued Posi in musical vibrations, "would be a catastrophe among some of the denser elements above one hundred ninety-seven and two-tenths in atomic weight. Such collisions are constantly occurring because of young electrons like yourself not attending strictly to business.

"These collisions occur constantly in radium, and the electrons are thrown off into space and after thousands of years, the radium will have totally destroyed itself. Radium is a 'discontented' element."

"Are the electrons that fly off in space killed?" queried Nega, her feminine curiosity intrigued.

"Millions are crushed and lose their momentum or life, but millions of others become part of other elements and have interesting adventures. I don't want to scold you, Nega, but you must never leave the path of your orbit. I will help you, but remember I have another orbital electron to watch and also to keep in harmony with my three brother protons that make up our helium nucleus."

"I've noticed you watching and talking to Orba, the other negative electron," stated Nega in jealous tones. "She's a cat. I don't like her!"

THE male always finds trouble when he courts two or more of the female sex. But Posi, vested with a million years of experience, was extremely wise—or shall I say politic?

"Nonsense, my lovely Nega," he swished out shrewdly, noting that Orba was engaged in conversation with one of the other protons. "You are the most lovely electron I've ever known. You are mine."

"I hope you mean that," returned Nega. "You're so big and strong and beautiful."

"Well," impulsed Posi in pleased tones, "I'm exactly eighteen hundred and twenty times as heavy as your elegant little self. But we must enjoy life for we will soon be separated—perhaps destroyed."

"What do you mean?" shrilled Nega, in fright.

"I've known for several hundred years that we are being drawn into the vortex of the sun."

"What will happen to us then?"

"The sun must be kept burning brightly to warm its solar system. Countless billions of us contained in the atoms of helium, hydrogen, oxygen, silicon and other elements, constantly stream into the blazing furnace of the sun. There the nucleus, or positive charge of some atoms is exploded, and the entire mass is transformed into a wave or pulse of energy. This released energy adds to the heat and light of the sun and prevents its furnace from turning cold and chilling its entire solar system."

"How hot is the sun? Will it burn us?" buzzed Nega anxiously.

"Hot," laughed Posi, "I'll say it's hot. Why, its temperature at the surface is six thousand degrees centigrade, or over ten thousand degrees Fahrenheit. But in the center, the temperature rises to forty million degrees centigrade, or seventy-two million degrees Fahrenheit. The sun burns off or loses a material quantity of about four million tons every second. Don't you see, Nega, that this mighty drain would in time deplete even that immense orb? So that's where we come in to do our part. We become fuel to feed the furnace of the sun."

Posi stopped for a moment, then he continued in a portentous tone.

"So, my lovely Nega, the wheel keeps turning around, atoms annihilated to keep the sun blazing, and then new electrons being born. A mighty cycle of life and purpose."

"Were we born in the sun?" asked Nega, now eager for knowledge.

"Great Cosmos!" laughed Posi, "how ignorant you are. We electrons are born far from the sun, but are created from its radiant heat that is being continuously condensed into positive and negative electrons, throughout the heavens Then the electrons wander about in space till they unite in various numerical combinations to form different elements. But mind you, Nega, the atom building occurs in extremely cold places of space. I do not know what mighty force brings two or more positive electrons together. That part is incomprehensible. Even the kinetic energy of the sun's terrific heat is not enough

* The British billion is used, which is a million times one million, as against our smaller billion of a thousand millions.

† Gold has 197 protons in a nucleus and 79 free electrons, and a total of 118 electrons. Gold is a "contented" element and never subject to self-disintegration as in the case of radium.

to unite two positive electrons—to overcome our natural repulsion. About a thousand years ago I knew an old proton; met him in an atom of silicon. There were twent-eight of us protons in the silicon atom, and fourteen orbital electrons like you, my sweet one."

Posi paused, and sighed retrospectively. There was a far-away look in his violet eyes.

"And I suppose you made love to every one of them," ripped out Nega with spirit.

"Of course not, my sweetheart," assured Posi in quick response. Then, inaudibly, that Nega might not hear, "How well I remember that young blonde. Amber, I called her, because she generated static electricity when I caressed her round, vibrant body."

"Tell me what the old proton said," begged Nega, interrupting Posi's pleasant memories.

"Oh, yes. That old proton was millions of years old. Poselect was his name; he was very wise. He said that when the electrons moved far out into interstellar space where the cold was near to absolute zero, that the vitality or energy of electrons became very low, and at absolute zero even their spinning movement ceased.

"With the loss of movement and kinetic energy, and simply drifting about, it is simple for the positive electrons to group together by chance in the various combinations of different elements. Then, as the entire mass moves into warmth and life, motion and energy are revived. So if four positive electrons or protons happen to be in a group, we naturally attract four of you negative electrons to balance us, of which two become orbital, and we all become an atom of helium; or if six of us protons happened to group up, we attract three electrons like you and three other nuclear electrons and become an atom of lithium.*

"That's what Proselect told me, and he was very learned. I know that the process of crystal building is facilitated by low temperatures and not by high. Atom building cannot take place in the hot suns or stars. It can only occur in extremely cold interstellar places."

"Then we have to be destroyed!" whined Nega sadly "How soon will we reach the sun?"

"You won't have to worry for a while, Nega. We are moving toward the sun at a terrific speed, but it will be about a hundred years before we reach it."

"How long is a year?" asked Nega. "You have mentioned it several times."

Posi considered this question for a considerable time. He was plainly puzzled for the right answer.

"You ask a hard question, my love, but I'll try to answer it. Time is the measure of duration. A year as a measure of time really means nothing out here in space. But I lived for many thousand years on a planet called Earth. It was there I got into the habit of measuring time in terms of years. Let me see. How can I give you an idea of a year as to time? Oh, yes, I have it, my dear. You revolve around our central nucleus two billion times every second of time."

"But what is a second?"

Again Posi considered, then glowed dazzlingly bright as a great idea struck him.

"Well, fair one, you know how long it takes you to make two billion revolutions around the nucleus?"

"Yes, my radiant lover, I guess I do."

"You should," snapped Posi, irritated at his lack of ability to explain "You're good at figures. Very few women are. Now get this.—It takes you one second to make two billion revolutions. Very well. Sixty seconds make a minute, sixty minutes make an hour, twenty-four hours make a day; three hundred and sixty-five days make a year. There you are, love. Simple, eh?"

"Yes, I see," stammered Nega, after a hasty and involved mental calculation "A year is a long time."

"No it's not, compared to our life. Anyway, that measure of duration is the way the humans on the planet Earth figured and recorded time. Those foolish humans do not know that time is a fourth dimensional energy. Each planet makes its own rule according to the movements of its particular sun or suns."

"You've been on other planets?"

"Yes," from Posi proudly. "I've traveled quite a bit for a young chap. Say, Orba, you glowing beauty, circle in closer. I want to talk to you."

"OH, Posi, please tell me more about the planet you call Earth."

Nega glowed a coquettish red as she asked the favor. For a considerable time she had been angry at Posi's attention to the shining Orba, and had refused to talk until she asked for the information about Earth.

"Oh, so you're ready to talk now, are you?" hissed Posi. "I always have said, 'When a woman gets sore, just let her alone, and she will soon snap out of it'."

"Don't scold, Posi. Tell me of Earth and its humans. What are the humans you spoke of?"

"I'm glad you ask me that, Nega. I've lived on several planets, and the people who live on Earth are my favorite people."

"People?" asked Nega. "What are people?"

"People—humans," began Posi, pausing to study for suitable words, "are living bodies that inhabit planets that are cool enough and not too cold. They have legs for locomotion and the most wonderful hands, and a certain sort of intelligence that is not so highly developed as ours. Of course, they have the fearful mental handicap of only living about seventy-five years. You know, Nega, that intelligence develops with time, experience, and observation. I've lived thousands of years and am still young—very young, my adorable Nega."

"How large are the Earth people—or humans?" purred Nega, now very much interested.

"That's hard to explain to you, Nega. You're such a child," began Posi. "Let's see—I have it. You have a fair idea of how large our atom is? Well, the sum of ten atoms raised to the twenty-seventh power, represents about the mass of an average human."

"My! How large!" shrilled Nega in amazement.

"Not at all large, Nega," laughed Posi. "Humans are only midway between the atom and the star. The mass of ten humans raised to the twenty-eighth power would equal the mass of a star."

"Is the planet Earth a large one?"

"It's quite small," informed Posi, proud of his knowledge. "The sun is a million times as large as the planet Earth, and old Poselect, the wise proton, told me of stars bigger than the sun. My dear Nega, when we shoot into the sun, we will explode. But the planet Earth, large as it is, would simply go into dust long before it reached the sun's surface. It——"

* This theory that the protons drift by chance together in a condition of absoute zero and suspended animation is solely an idea of the author and should be considered as such. Up to this point, theories are taken from the works of Dr. Robert A. Millikan, Mills, Eddington, Aston, Dirac, and Einstein.

"Oh!" whined Nega in dismay, "does it do that?"

"Say!" shot out Posi in half anger, "you're the dumbest woman I've ever met. I mean that is what would happen if the Earth should fly into the sun. But don't fret your pretty head, my beautiful but silly one. That will not happen."

For a time Posi turned to one of the other protons who had called to him, and the two talked in violent and excited vibrations. Nega swung in a bit, but her younger, untrained ears could not catch the import of the conversation. She could plainly tell that something important had happened. Finally her curious nature could wait no longer.

"What's the matter, Posi?" she impulsed.

"Matter enough," answered Posi sadly. "Well, it had to be. It's come at last."

"What has come?" demanded Nega, now thoroughly frightened.

"We will be in the sun's furnace very soon, and then it will be goodbye!"

"But you said it would be a hundred years before we reached the sun," protested Nega.

"I was wrong, Nega," stated Posi reluctantly. "A message has come in that we are nearing the sun, and its gravity pull is increasing our speed towards it every second. We will——"

"Then we will burn up. Oh, Posi, what can we do?" wailed Nega.

"Oh, cheer up," hummed Posi. "It happens to us all sooner or later. Besides, we may come through in fine shape. But certainly we will be separated—perhaps forever. So let's begin saying goodbye. We will feed the sun and be converted into radiant energy and be shot out into space again as such."

"Energy?" puzzled Nega, her eyes now quite dry, but very red.

"Yes," began Posi. "Even one as small as you can become ergs of energy."

"What are ergs?"

Posi was compelled to study for some time. Finally he sizzled out:

"Will you ever learn anything-? Energy, measured in ergs, is equal to mass, weighed in grams, multiplied by the square of the number representing the velocity of light in centimeters."

"I understand," buzzed Nega archly.

"You're fibbing, you pretty scamp," swished Posi. "I don't understand it myself. But that's what old Poselect told me. We've only a short time to be together, so let's have a lot of fun before we strike the suit."

"I'm with you," laughed Nega. "What'll we do?"

"Never mind. I'll arrange the details. Now, young lady, may I have the next five years?"

"You've got a date, big boy!"

TIME, that mysterious force—or is it a force?—flowed on in its steady, dimensional stream. All the Universe was a little older. Life, vibrating, incomprehensible, but mighty of purpose, went on in its relentless wave of evolution.

For Posi and Nega life was a happy business of whirling, circling labor—but a labor of love and instinct. The marvelous, unexplainable flow of electric energy gave them power and life. From negative to positive flashed the electric life, and the whirling dance of Life went on.

Posi and Nega were nearer the sun now; their time was short. They would soon reach the mighty furnace of the blazing sun. Not burning or blazing in combustion as we know it on Earth—the burning of a fuel by oxygen. The radiant energy of the sun is generated in its interior by the explosion and disruption of atoms.

"So, my darling Nega. We are going to be exploded. We will fly apart. They say it's an easy way to pass out." Posi paused and sighed. "It's tough after meeting you and just becoming such good friends. Why, we've known each other only a thousand years. Now we have to be blown to pieces."

"To small pieces?" groaned Nega. "What are we made of?"

"Our bodies are made up of solar systems, just like our atom of helium. You see, Nega, it's all very wonderful. The sun and planets are protons and electrons. So old Poselect told me. Those vast worlds are simply electrons within an atom, all making up the mass of some mighty something. Don't you see? They revolve in fixed orbits just like we do in our nucleus. We——"

"Old Poselect must have been very wise," interrupted Nega. "How did he know so much?"

"Well, my sweet one, Poselect lived on many worlds. Once he told me of living on a large, very old planet, that was millions of years ahead of other worlds in evolution, science and knowledge. When he was on that world, he had the greatest luck that can come to a proton. He lived in the brain cell of a most learned scientist. Poselect said that the human was the most learned in the whole universe. But let's get back to what Poselect said about the plants and electrons. He——"

"But what am I made of?" again broke in the impulsive Nega.

"Say," snapped Posi, "if you don't quit interrupting me, I'm going to make love to Orba."

"You wretch, you flirt!" retorted Nega. "Why, you make love to her every time any of the other three protons obtrude their bulk between you and me. You are a mean——"

"Oh, forget it," soothed Posi. "It's no time to quarrel. We've too short a time to live. It's all too hard to understand," pouted Nega. "Tell me more about those humans on earth, and how they made love."

"Oh, yes, love. Now, my sweet but obstreperous beauty. Love is my dish. Pull in a little closer. I—Say——"

Crash!

Posi's voice ceased as a great, sudden shock jarred them cruelly. For a split second the relation of the four protons and two orbital electrons were greatly disturbed. Then instantly they were all in proper circles and position.

"We've struck the sun! We're going to be killed!" screamed Nega in terror.

"Shut up!" ordered Posi. "It's not the sun. I know that, for our temperature is too low. Something's hit us. Keep still. There's news coming in. Maybe this is a lucky break. And say, you pretty little bone-head, watch your flight. Keep your circle true. Haven't you any orbital pride?"

Posi turned to converse with the other protons, and Nega waited impatiently. Finally, when it seemed to Nega that her curiosity could no longer be controlled.

Posi turned to her, fairly glowing with pleasure and excitement.

"Well, Nega, what do you think? That collision we felt was a space rocket that struck us. What a glorious piece of luck! The mighty space rocket, flashing through space, ran into us. We are in one of the impellant tubes in its nose, and we are going to——"

"How did you find this out?" Nega's query was almost a demand.

"Don't you know how we protons communicate?" demanded Posi in surprise. "Why, you know there is a flow of electric energy through all of us eight in this atom of helium. Well, my dumb one, this flow of energy goes on to other nuclei, and on and on—and on. So we ask each other by sending thought impulses along the electrical energy stream. The messages travel along their billions of gas atoms till they reach the metals of the space car. Here the message slows up a bit, for the elements, being metals and solids, are denser. You see what I mean. There are more protons to relay the news. We finally get a message through to a proton in the brain of the space car's commander. So I'll be able to give you all kinds of news. Don't ask fool questions. Just listen from now on."

Posi stopped for a long time as relayed news came to him.

"Here's something great, Nega!" he suddenly whistled. "This space car is from the star, Alpha Phœnicis, and——"

"What is Alpha Phœnicis?" interrupted Nega.

"Oh, never mind," sung Posi. "The big news is that we are going to the planet Earth!"

"Oh, yes," sighed Nega, "when we get there, Posi will you show me how those humans make love?"

IF Posi and Nega had possessed infinitely small chronometers, that would have measured time as Earth humans calculate, the elapsed time, since being struck by the space rocket, would have been one year and two months. Such a period of time meant nothing to two electrons whose life extended to millions of earthly years.

"Everything's going fine, Nega," informed Posi. "We protons have established almost a direct line of communication to Una, the proton who lives in the space rocket commander's brain. He's a fine chap, that Una, and almost as intelligent as Poselect. Lucky for us he's a great talker. Likes to give out information and gossip. Just like a woman that way."

Posi stopped to smirkingly enjoy Nega's indignant glow of resentment at the slur for the negative sex. Finally she glowed a pleasing violet.

"You're a delightful rogue, Posi. You don't mean half that you say. You positive male creatures have your bad points. Don't forget that."

With the passage of time Nega had grown older and more experienced. Wiser she was now than when born in the "cold places." Now her keen wit often thrust back sharply at Posi, who smugly fancied he was the Don Juan of the atomic universe.

"I'll tell you what I've heard about the space rocket," from Posi, anxious to change a dangerous topic.

"I'm waiting anxiously, my learned Posi," answered Nega, quite sarcastically.

"The space rocket," started Posi, stopping for a second to pull the erratic Orba into her proper circle, "is from the star, Alpha Phœnicis. That star is fifty-five light years from the planet, Earth.

"Is that a long ways, Posi?"

"By the great Cosmos," snarled Posi in a sudden red anger, "it was only three hundred years ago that I told you a light year is six million, million miles. But I must not lose my temper with you. After all, you're only a silly woman."

"I'm sick and tired of your wise cracks about us women," snapped Nega, flashing violet in rage. "I guess we're just as important as you males. Don't I fill just as important a part in our nucleus as you do? When two of you vain protons get together—quite by accident—doesn't it take just one of us negatives or females to balance the nucleus? Come to think of it, we're more important, for it always requires only half as many of us negative planetary orbital electrons in any element to balance your nucleus'."

Nega's voice rose to a whining shriek as she went on passionately.

"How do you get that stuff, calling yourselves protons? You're only positive electrons. You should call yourself morons! Look at your big, lazy hulks—four of you, each 1,820 times as heavy as me in this nucleus of helium! And Orba and myself can balance half of you. You're just a big bluff, and besides you're a scamp and a hopeless flirt! You're a——"

"Now, now, my sweet Nega," mollified Posi, breaking in on Nega's tirade, "I was just teasing. You're just as important to atomic life as I am. We're all part of a vast scheme of life." Then the clever rogue used his best sophistry.

"Why, I remember when I was on earth that a great human philosopher wrote that 'without women the beginning of life would be helpless—the middle devoid of pleasure—the end without consolation.' Humans know that woman—the negative—is the necessary pole to man's positive. Either sex is necessary to the other. Together they form the perfect human, and so it is with us, my lovely child. So it is with us. So dry your beautiful eyes, and glow a pleasant red for me."

Nega, ever gullible—as women are—scintillated a fiery red, and her speed increased till she whistled shrilly in happiness.

"Gosh," muttered Posi to himself, mentally wiping his fiery brow, "that dame is learning fast." Then aloud, "Now listen, here's something that will interest you, Nega." Posi was anxious to change the subject.

"This space rocket, that so luckily picked us up, got off its course and was nearly pulled into the sun as it came dangerously close to that fiery mass of gas. I wondered why a space rocket would come so close to the sun. When the space car struck us, it was fighting with all its power to repel itself away from the sun. Una, the proton, who lives in the space car commander's brain, tells us that for months the brave commander did not know whether the space car would be pulled with the sun or not. Finally the terrific power of the car's repulsion tubes won, and the space car gradually drew away from the sun's terrific pull. Now we're safe from that danger, at least, and well on our way toward Earth. Una says the human commanding the space ship is a great chap. Una is very proud to be a part of his fine brain."

"How can this Una come to be in the human's brain?"

"Now, Nega, that's a strange tale, as Una tells it.

It's true, but weird. First let me tell you that these humans are subject to many ills and sicknesses. Their bodies, while very agile and movable, are soft and very easily disintegrated. Their composition is not hard, but soft and yielding. Nature has fitted their bodies with bony skeletons to hold them rigid and strong, and given them blood pumps and arterial streams to repair broken-down cells and to replace the ravages of sickness or accidental damage to tissue. Their form of life is very different from ours. We draw needed energy to repair losses from some mighty electrical energy that fills the whole universe and from the penetrating cosmic rays. Humans depend on this source very little in a material sense. They eat food which is converted into energy. Well, to go back to Una's story.

"It seems that many years ago, the commander of the space ship was very ill from a strange fever he had contracted on a new planet. Una says the commander is a great adventurer, and has visited many worlds. Learned physicians, as they call those humans who repair other humans, gave the commander some calomel as a cure for the fever. Then——"

"I don't see yet how Una got into the commander's brain," broke in Nega.

"Just wait and don't interrupt. That calomel contained mercury, and Una was living a dull and very crowded existence as a proton in a nucleus of mercury. And, my dear Nega, every nucleus of mercury contains two hundred protons and one hundred and twenty electrons; there are eighty electrons which are free or orbital, like your glorious self."

"So you see," went on Posi, after a brief halt, that the fair Nega might well appreciate his learned discourse, "that Una, the proton, was crowded. Then it happened that when the mercury got into the human's blood stream, the mercury nucleus, of which Una was a part, by some miracle of chance went by devious courses and after incredible adventures lodged in a broken-down cell of the human commander's brain. Una is very proud. He says he has been there for many years in the commander's center of intelligence. He knows everything that is going on in the human's mind. Una is a lucky fellow. Countless billion, billion, billions of protons tune in with him constantly and listen to his words. Una is a mighty proton among protons."

"How long will it be before we reach Earth?" asked Nega.

"Una just sent out impulses telling us the human commander has checked his course and speed, and that we would reach Earth in about six months."

"What may happen to us there?" begged Nega.

"It's hard to say. A lot of things," puzzled Posi. "In fact we may drift out of the impellation tube before we reach the earth's atmosphere. If so, we will drift in space, Cosmos knows how long. However, it is extremely likely that we will remain safely in this tube till we reach the earth's stratosphere. Then, of course, the commander of the space ship will expel terrific blasts of gas from this tube to retard and control his landing speed. At the first blast we will be flung out, but in the earth's atmosphere. We will in time settle and drift, and perhaps reach the earth's surface. In the meantime, however, we may be absorbed by and become part of a nucleus of oxygen. There's a nice element. Perhaps, then, we will be breathed into the lungs of some earthly human. We can't tell what will happen. It's all very——"

Posi stopped, and from his dull, golden glow, Nega knew some important and startling news was coming to the proton.

"Great Cosmos!" suddenly impulsed Posi to Nega. "Get ready for a shock. Here's real trouble. Hold fast to your orbit. Una has just sent out a general alarm that the space ship is about to collide with a meteor of fearful size——Hold fast, Nega! Hope we meet again. Goodbye!"

Crash! Pandemonium!

The four protons and the two planetary electrons in the helium nearly made actual contact as their orbits were compressed in from the fearful impact and terrific pressure.

Nega was stunned and hurt, but in some manner she managed to partially hold her flashing orbit true for a split second. Now came a new horror!

Heat! Melting and disintegrating! Nega felt herself shoot from her orbit and heard the anguished cry of Orba. Then a horrible maelstrom of confusion. Thousands of electrons, strange to her, crowded and bruised her.

Chaos, and disorder!

Nega's last thought before she fainted was that a slight semblance of order was coming out of the vast confusion.

NEGA struggled painfully back to consciousness. Her first surprise was to find she was still merrily whirling in an orbit—but a new, strange orbit!

There were many negative electrons like herself flashing around, and much closer than before. What had happened? Why was her circle of flight smaller in circumference?

"Hello, Nega, old sweetheart!"

The welcome voice of Posi was music to the frightened Nega.

"Oh, Posi, it's good to hear your voice. Where are we? What has happened? It's all so strange."

"One question at a time, my lovely, shining one. By the way, you look very charming in your new orbit. We sure were lucky to get in the same nucleus. It wouldn't happen once in a millon times. You can thank me for that. When the crash and the heat came, I concentrated all my energy pull to you. That must have held us together."

Then Posi looked a bit sad. "We lost poor Orba. She must have gotten into another nucleus."

"But where are we?" insisted Nega, now greatly relieved.

"Our space ship collided with a great meteor. Both were traveling at fearful velocity, and the space ship buried itself into the meteor. The impact caused a fearful, sudden heat to generate. Many elements that made up the space ship melted and ran together, or mixed with elements of the meteor.

"The meteor is ninety per cent pure iron as meteors frequently are. I don't know how, but in some mysterious alchemy of the heat and pressure, we have become part of a nucleus of pure iron. We have lots of company in this nucleus. There are fifty-six of us protons and thirty nuclear electrons, and twenty-six which are orbital, like your darling self."

"Poor Una must be lost, or at least the commander

was killed, and it may be years before Una can get in contact with us. Una is, of course, alive. Protons are almost impossible to destroy.

"But I've made some new contacts, and I've learned that this comet and what is left of the once fine space car, now welded into a shapeless mass, is headed for Earth. You see we had just entered the gravity pull of earth when the collision occurred. I think the sudden fearful pressure helped our transmutation from gas to metal more than the heat. Anyhow, in some way it happened, and now we are part of a nucleus of iron. And what a fine bunch of protons. They've been around a lot, too. And there's a fine group of negative electrons. I met them all while you were unconscious. Do you know you passed out for two weeks? Here, Nega, meet Neti, Noga, and Giva."

Posi glowed importantly as he introduced Nega.

"Glad to know you girls," stated Nega, but her voice was a bit defiant and not exactly sincere.

Woman, thou wert ever a jealous goddess!

"IT'S been growing steadily warmer the last few minutes," suddenly informed Posi. "That means just one thing; we have entered the earth's atmosphere, and the friction of our meteorite with the atmosphere is building up a fearful heat. I just got word that the outside portion of it is beginning to glow with heat. You want to get ready for another test, Nega. As we become hot and hotter, your speed of rotation will keep increasing. It will be terrifying and painful, but you must be of stout heart. Fortunately we are located a considerable distance in from the outside crust of the meteor, so we won't have to withstand the terrific heat of the outer part."

"What is a meteor?" questioned Nega, who did not seem unduly worried as to her fate.

"Old Poselect used to say that meteors are fragments of other worlds shattered, perhaps, in terrific celestial collisions, that the impetus of such tremendous collisions hurled the vast and smaller fragments out into space. Poselect said some great scientists thought that comets were of cosmic origin—manufactured in space, somewhat as you and I were made. When I was on earth before, I heard that no element had ever been found in a meteorite that was not already known on earth, and that of the known ninety-one elements, at least forty had been found in meteorites. I heard, too, that meteors are often about eighty per cent iron."

"I'm growing very hot!" stated Nega in a worried tone. "It's very uncomfortable."

"Think of the billions and billions of poor electrons on the outer shell of this meteor. They are having a hot time now."

"Will we be hurt when the meteor strikes the earth?"

"No," assured Posi. "I doubt if we even will feel the impact. There is a vast area of open spaces, between electrons, that exist between here and the outer side. This will act as a cushion and absorb the landing shock. Besides, we will be traveling very slowly for us when we strike earth. You see, the atmosphere will have checked our speed until we fall at a rate due to the earth's gravity pull."

"Perhaps we will strike in one of those oceans of water you told me about. Then we will not feel the shock so keenly."

"You've still a lot to learn, my lovely one," explained Posi impatiently. "If we strike water, a liquid, the impact will be greater than if we strike the land. You see, Nega, water cannot be compressed, and a sudden blow as our mass striking it in a dead fall would not give the water time to flow away from the impact. So the effect would be that of striking a perfectly solid substance. Wait a minute, Nega. Here's a message coming from the outside. Why,—why, we've landed!"

"We didn't even feel the impact with earth." Nega could think of no better words in her excitement.

But Posi was not listening to her. His every faculty was concentrated to receive news along a chain of billions of protons.

Finally he began to speak to Nega with a worried color on his round face.

"Well, Nega, I guess we're tied up to an uninteresting life for a few thousand years. Our meteor struck the earth in a place called Arizona, and plowed straight into the ground several hundred feet before it stopped. The earth fell in over us, and we're cooling off rapidly, as you can feel.

"Fortunately our life-giving cosmic rays can reach us here easily. Did you know, Nega, that cosmic rays can penetrate and pass through seventeen feet of solid lead?"

"No, I didn't know that, Posi. What is lead?"

"Lead," began Posi automatically, "has two hundred and seven protons. Eighty-two free orbital electrons like your own sweet self, and one hundred and twenty-five of those stupid bound electrons besides. Say," Posi stopped as his anger suddenly mounted, "don't you know anything? I told you that before. Life is going to be mighty dull in this cursed hole with such a dumb cluck as you. You——"

"Just a moment, big boy. You never told me that before," burst in Nega. "You know you didn't. And get this into your conceited skull. Life is not going to be so dull for me. You're not the only proton in the nucleus! You're getting along in years, and you don't glow as bright as you used to. There are plenty of fine young protons in this nucleus."

"I notice you have been casting colors at them," snarled Posi.

"And I notice you've been flirting with all the other negative electrons—you—you senile old wretch, you!—"

And thus it went on and on—as true love progresses—far into the centuries.

THE relentless stream of time flowed onward. The solar system travels through space at the rate of approximately a million miles a day—in what direction no one can say, for in the endless voids of space there is no north nor south; no west nor east; no up nor down.

Motion, energy, time, life—all part of a vast super-controlled universal plan!

Many years Posi and Nega existed in their iron nucleus with the great meteor that lay deep in Arizona soil. Humans from all over the earth speculated on the great crater and wondered what mysterious object lay deep in the earth.

That immense crater was hundreds of feet across, and its contour showed that some mighty celestial visitor had, eons before, struck the earth with fearful impact.

Life, its meaning, its purpose, its ultimate goal—was a mighty problem to Posi and Nega. But that infinite impulse, that incomprehensible instinct that actuates and

dominates all life and motion, spurred them onward to exist—to survive. And Posi and Nega vibrated and whirled—spinning.

"Well, Nega," purred Posi, "we've been buried in this hole for too long. This cursed meteor is a tomb. I wish we could reach the surface of the earth, where there's something doing. Life is a mighty dull proposition here. I——"

"I don't see that it's been so dull for you," interrupted Nega, showing her angriest color. "There are a lot of us negative electrons in this nucleus of iron, and you've made violent love to every one of us. You can only stay true to one woman for about a hundred years at a time."

"Well, that's a long time," hastened Posi, "but of course all positive electrons are not so beautiful as you. And I got some great news a while ago. It looks as though we may get to the surface and have some real adventures."

"What have you heard?" shrilled Nega in pleased excitement.

"Nega, old dear," began Posi, "you know what has happened on Earth the last thousand years. A great civilization has grown. Not so advanced a people as have existed in past eons, but a great people. We have followed their upward struggles with sympathetic interest. From sluggish protoplasms in dismal swamps, they have evoluted. They have come to what they believe is a great civilization. If they but knew of the progress and achievement of humans on other planets! If they but knew the glory and knowledge of super-races that have lived and died on this very earth!"

"Oh, Posi," begged Nega, "don't tease. Tell me the good news you've heard."

"You're always in such a hurry," snapped Posi. "I just heard that a party of Earth scientists are starting a great shaft to dig down to us. The humans on Earth are interested, not in us, but in the composition of the meteor. They hope to learn from it secrets of other planets. Perhaps we will be lucky enough to be taken to the surface and released into some other element."

"What will the Earth humans do with us?" purred Nega.

"It's their curiosity and a desire to learn of other planets. But of course," answered Posi, very proud of his fund of information, "they won't learn anything from this meteor about other planets. But they have found that there is platinum of about one-half of one per cent in our composition. We——"

"Platinum?" interrupted Nega. "What is that?"

Posi was in a fine mood at the moment and for once quite agreeable to give out information.

"My beautiful Nega, it's a shame your sweet sex has no brains, but anyone so alluring as you doesn't require much sense. Platinum is a very rare and valuable element on this planet. Its atomic number is seventy-eight. Its atomic weight is one hundred and ninety-five and two-tenths. There's a nice little rule for you to remember. To discover the makeup of any element, take the full number of the atomic weight. That represents the number of protons in the nucleus, as platinum one hundred and ninety-five. Now the number of free orbital electrons is represented by the atomic number, in this case of platinum, seventy-eight. The nucleus therefore consists of one hundred and ninety-five protons, and the same figure less seventy-eight or one hundred and seventeen nuclear electrons. The number of the weight in any element is accepted as the number of protons."

Posi stopped to let his next statement register in its fullest measure and went on very smugly, "because we protons compose practically all the weight of an atom."

"You're sure you don't mean morons?" blazed Nega with sudden red rage. "I don't care anything about your silly mathematical rules. You!——"

"Don't get sore," soothed Posi, "I was just teasing to see you glow your charming red. Do you know, my sweet, I really love you very much. If you were an Earth woman, you'd be a red-head."

"Is love an element?" asked Nega, trying to increase the red vibrations of her hissing, whirling orbit.

"Great Cosmos!" laughed Posi, "I believe you're reaching maturity. Love is not an element. It's a tender and passionate affection for one of the opposite sex. It's a mighty electrical, energized attraction among us electrons to complete the needed pole for our precious energy-current. Among humans, it's an instinctive sex impulse. It's a—Say, if I could answer that question, I would be the greatest philosopher in the atomic universe! And you, a red-headed woman, ask what love it. This is rich! Ha! Ha! Say, Trona!" Posi impulsed to a spinning negative electron in the same atom, "tell this child, Nega, about love. You're old,—I—er—mean you're older and you've been around a lot."

Trona, a silver violet glowing about her plump figure, swung in a bit to hear better.

"What does Trona know about love?" shot out Nega, a bit angry at Posi's amusement, and resenting the intrusion of another woman.

"Say, listen, child!" burst in Posi, "Trona once existed in a carbon nucleus that was part of a great diamond on the finger of an Earth woman named Cleopatra. Trona learned plenty. This Cleopatra was a red-headed woman like you, and she raised merry chaos with human history. She was—well, you listen to Trona!"

For many days Trona buzzed intriguing words into Nega's eager ear. At times the rogue Posi attempted to listen. But two women were exchanging confidences, and Posi turned to other electrons for conversation.

"Oh, Trona," begged Nega breathlessly, "tell me more."

Nega's softly glowing red was a flush of pleased embarrassment.

"SAY!" finally burst in Posi, "you dames are missing something. Here's news! The party of Earth scientists will reach us 'most any minute. Lucky for us we're located in the top of the meteor. They'll reach us first."

"How did the earth humans know the meteor was here?" asked Nega.

"They could tell by the great crater in the earth that an immense meteor had struck the ground at an angle. They drilled small holes down to locate us, and now their larger shaft is nearly to us. We are thirteen hundred and forty-seven feet below the surface, and are not located directly under the crater, but at one side."

"How long is a foot?" asked Nega. Posi did not reply for a considerable time. He was studying. Then he spoke.

"Our atom is about one hundred-millionth of an inch in diameter. Twelve inches make a foot; so figure it out yourself. And here's something else to puzzle your

pretty head. Our meteor is about ten million tons 'in weight'."

"What is weight?"

"Weight is heaviness—a comparative tendency to the center of this Earth-globe. Say, I'm sick of answering your fool questions. You're a——Say! Wait a minute. Here's a message coming in that *is* news."

Nega swung her orbit the very slightest in keen interest.

"Well, Nega, here is more trouble. The earth scientists are setting in a great blast of dynamite. When it explodes, we may be torn apart from this nucleus. We stand a good chance of remaining in our little nuclear solar system, for it takes a mighty and sudden release of energy to separate us. I'll attract you with all my power when the shock comes."

"Oh, Posi, I'm so afraid!" whined Nega.

"Buck up and hold your orbit. This may be great luck for us. The Earth scientists are blasting to obtain specimens of the meteor. They'll take the broken pieces to the surface. Perhaps we will be taken. Oh!—Hold fast! Here's the explosion!"

Crash!

For a moment the electrons, spinning fast as light, wavered and oscillated. Their flights became tortured shrieks. Then instantly all was quiet and normal. No harm!

"Not bad at all," sung out Posi. "Everyone okey?"

"Oh, Posi, you're so brave. I could feel your pull all through that ordeal."

"I might have known the gas expansion of the explosion would not have harmed us, and now what do you think, Nega, my love? This very second we are in a great bucket being elevated to the surface. We're going to have adventures from now on. Keep still, now, while I establish some new contacts for communication. Gosh, it's great to get out of that hole!"

TENSE moments passed. Nega could plainly see that Posi was receiving interesting messages along the connection of many billion protons. From the intense violet Posi was radiating, Nega knew the news was important. At last her impetuous curiosity would not be controlled.

"Posi, what are you hearing?"

"A lot of fine news. I've got on a fine circuit of information. We've reached the surface of the earth, and the scientists are taking us to a laboratory. Wait! ——" impulsed Posi so sharply it startled Nega. "Wait —here's more news—we're going to a laboratory to be analyzed. That's not so good. These scientists are always trying to pry into our private lives. They——"

"What will they do to us?" shrilled Nega in feminine terror.

"Oh, they'll subject us to all kinds of tests. Probably try to separate or divide our nucleus. 'Atom smashing' they call it. They want to find out what we're made of. Wish I could talk to them. I could save them a lot of trouble. Here's more news coming through."

For a considerable period Posi would not talk in spite of Nega's impatient pleading. Finally he glowered a pleasant, deep violet and vibrated a startling message.

"We're now in an experimental laboratory, and we're sure in for a fine mess of trouble. We're in the Institute of Technology at Pasadena, California. A great place, this California. I remember being here many thousand years ago. I lived very comfortably for a long time in a nucleus of sodium. A great prehistoric human named Dowb licked me into his system from an outcropping of the precious salt. For eons I had existed in that mineral ledge, and was just exposed to the atmosphere and the horrible risk of oxidizing when, luckily for me, Dowb came along hungry for salt. Humans, and the mighty vertebrated creatures that roamed the land, came for many miles to lick the needed salt. These incredibly large and voracious monsters—some winged—were a source of constant danger to Dowb. One day Dowb, a terrific scrapper, tangled up with a hungry saber-toothed tiger. Dowb was hurled wounded into a tar pit, and for many hundred years—but that's a long and interesting story, my dear Nega. Some day I'll tell you all about it. Let me listen in for news."

For the next few days Nega gossiped with other electrons. All were greatly excited at the news of reaching the Earth's surface. The poise of their vibrating conversation was as the hum of millions of bees—only more intense and infinitely higher pitched.

At last Posi buzzed in angrily. It was evident some disturbing news had reached him along the stream of uncountable protons.

"Say, you dames! Pipe down!"

"What is it, Posi?" purred Nega. The sweetheart of Posi, she was as usual taking the full privileges of her standing. She was the only electron that dared talk back to Posi.

"I'm worried, my sweet," hissed Posi, with an agitated, nervous vibration. "This looks like a bad jam. These scientists, led by their greatest—a Dr. Robert A. Millikan—are getting ready to try some fearful experiments on us. I've located a fine proton in Millikan's brain. His name is Potor. His home is a nerve cell in Millikan's *corpus callosum*. A great man, this fellow Millikan. Potor says he is one of Earth's greatest scientists. Potor states we are in great danger from the tests that are in store for us. Billions and billions of us in this tiny piece of meteor have begged Potor to try and influence Millikan against his experiments."

"Why! Can electrons communicate with humans?" whistled Nega in surprise.

"No, and yes." Posi's bright violet dulled as he considered this mighty question. "You see, in the fine, keen brain of Dr. Millikan there are countless billions of protons. With the leadership of this powerful Potor, they will all set up certain vibrations in unison. These vibrations are intended to act on the brain cells in Millikan's center of intelligence. It probably won't work. Protons for many thousands of eons have been trying to get a direct contact or influence with humans—but there is some mighty barrier—some obstacle that cannot be surmounted."

"Then why try? Has it ever worked?"

"There have been many, many cases where the great united influence of protons has in a slight measure affected the intelligence of a human. But only so slight that it merely caused the human to experience thoughts foreign to the subject's mind. Dreams—memories of the subconscious mind the humans call such impulses. Some day my radiant Nega, we will break through and establish a perfect line of thought and communication with these human scientists." Posi's speed increased as he waxed eloquent. "And then what a civilization! What we electrons could tell humans! What wonders

of chemistry and new structures of elements could be wrought! For the human race, it would be almost the ultimate. They could provide for their every need—except the needs of the soul."

"The soul?" interrupted Nega, "what is a soul?"

"My child, I do not know. Even the wise proton, Poselect, did not know. He used to say the best definition was that the soul is that mysterious force and intelligence of life controlled and actuated entirely by the Ruler of the Universe."

"It's all too puzzling for me," whined Nega. "But tell me, are the protons in Millikan's brain trying to influence him to stop his experiments on us?"

"Yes, they are working now. Billions of them trying to send vibrations into Millikan's consciousness. But I don't suppose they can do anything more than give that splendid scientist a bad nightmare. Strange about these scientists! They have found that plants, trees and flowers have a high form of life; certain intelligence and definite powers of movement and reactions. Yet their useful, active minds have never conceived that we electrons—the highest life of motion and vibration—have an advanced form of life also! Some day, though, we will communicate with them."

"Why do they try to hurt us in this experiment?"

"Foolish woman," shot Posi. "They are not trying to hurt us. They don't know. They are laboring at the bottom of a vast sea of yet undiscovered wonders. Because of these earnest scientists, humans are advancing in wonderful strides. These fine, brave souls have looked into our atoms with their microscopes and into the heavens with their telescopes. They have established basic facts. Their discoveries and proofs have saved humans from the yoke of cruel, intolerant creeds and superstitious, ignorant religions. With microscope and chemistry, they have almost vanquished the germs and diseases that attack their soft, weak bodies. Marvels of science, invention and knowledge are theirs, because of these scientists who dared to look for reasons. But what's the use of talking to you? You don't understand. I'm going to listen in."

Nega, for once in her busy, whirling, glowing life, was silent. She considered well the words of Posi. She felt suddenly that no terror would ever again disconcert her. After all, she was such an infinitely tiny part of it all. Her thoughts were shortly interrupted.

"Nega, my sweet one, Potor has just sent out a general alarm. He says the attempt to influence Millikan was a dismal failure. Millikan told a friend his dinner had not agreed with him. A fine piece of business! They've built a great machine to produce a low temperature, about two hundred degrees below centigrade, or perhaps near to absolute zero. Don't you see! We will be in about the same condition as we were in interstellar space—just before I first met you."

"What are they trying to do?" shrilled Nega.

"Potor says they have at last guessed that the production of absolute zero makes possible the transmutation of metals. You understand, as the cold comes, we will lose our speed and powers. I will not be able to attract you. We will be forced together by pressure to form a solid compact mass, where the swirl of electrons 'round their nucleus will definitely cease. Our scrap of iron, they hope, will become neutronium, or some such element. In other words, we will become so compactly crowded that a cubic inch of such an element would weigh a million tons! Life would be unbearable in such a crowded condition. But don't worry, Nega. They can't keep us that cold forever, and when we warm up, we will expand, start new orbits, and cause elements to form."

"It's getting cold now," moaned Nega. "Look!—all the electrons are slowing, and they do not glow brightly."

"Yes, Nega," answered Posi slowly and with difficulty. "We are losing energy very fast. I'll do all I can to hold you to me. Hold tight, my sweet. We'll come through. We——" His vibrations ceased, and Posi felt his round body crushed in by other elements. Their contact was strangely repulsive. He struggled desperately to repel them, but it was useless. He had no power—no energy. Why! That tiny red electron was Nega! Her little body felt strangely comforting and pleasant. With all his fast going energy, Posi concentrated on one last powerful attraction to Nega——

Then suddenly life seemed to cease. Billions and billions of electrons massed crushingly—became inertly solid.

WOULD that this weak pen possessed inspired strength to describe the wonder of that mysterious power; that infinite energy that permeates the entire universe; that mighty Intelligence that directs motion and time in so orderly a fashion, even to the incredible details of matter's numerical atomic composition!

Truly the fall of the sparrow is well noted when the orbit of the electron's electron with an electron is ordered and guided!

The mighty law that directs an atomic count to each element reigned supreme. The scientists eagerly searching for truths allowed their refrigerating machine to warm up. The law of motion and energy prevailed, and the lifeless globes of Posi and Nega began to struggle and move—slowly at first—then faster and faster. With warmth and motion the electrons began to repulse others and enlarge their orbits. Thus the entire mass expanded. In a miraculously short time, Posi and Nega were spinning away the same as ever.

The inevitable miracle of matter had again occurred!

Posi and Nega were again positive and negative electrons within a mass of iron! That mysterious force and law had restored them to their original status.

"Well, my dear Nega," purred Posi, "we came through that in fine shape."

"Oh, Posi," rasped Nega, still wobbling and oscillating, "it was terrible. What will they do next?"

"I don't know," admitted Posi. "I'm working now to re-establish my line of communication. Here! I've got it now. They're going to shoot us with a cosmic ray gun!"

"But you told me cosmic rays came from the sun."

"I did not. Cosmic rays do not come from the sun, because they strike Earth with the same effect at midnight as at noon. They are not coming from any stars. Cosmic rays are due to the production of atoms."

"I can't understand it. What will happen to us now?" Nega was braver now than in past eons.

"Keep still," hissed Posi, "and listen. We're in for a hot time now. Potor says we're doomed! Here's more news——"

Nega and the others waited anxiously. What new, horrible ordeal was in store for them?

"Millikan has built a device that he calls an 'Alpha

Ray' machine. This device, according to Potor, will bombard us. This damnable contrivance will hurl a voltage of nearly three hundred million volts into our nucleus. We——"

"Do you really believe, Posi," interrupted Nega quite calmly, "that we're in serious danger?"

"Of course we are. Should our nucleus be exposed to that fearful bombardment of heat and tearing, hurtling energy, we may be completely destroyed—disintegrated. You and I must say goodbye, my sweet——"

"We may not be killed. Cheer up. Perhaps we will be transmutated into another element." The worried Posi failed to note that, in this deadly peril, Nega was calm and brave.

Woman—more sensitive, finer grained than man—is constantly more excitable and emotional than the male. But some mysterious instinct informs a woman when crucial danger exists, and then a marvelous spartan-like courage and fortitude comes to her.

"Small chance, Nega. The powerful discharges of energy will break up the billions of little solar systems in each of us. That means loss of our bodies—disintegration—what the humans call death. How beautiful you are, Nega, and how brave." Posi stopped; his softly glowing, dull violet indicated the turmoil of his thoughts. The countless years of his varied existence flashed in retrospection through his mind. His vibrations were strangely soft and tender as he spoke to Nega. His tones were portentous—prophetic.

"A fine race, Nega, my dear. These humans, I mean. They're destined to rule the universe. They are fast developing super-intellects; even though their bodies are soft and easily destroyed. With their marvelous power of self-directed movement, and their wonderful hands—miracle hands—to make things, they are the most powerful of any form of life or motion. In the past few hundred years they have delved with agile fingers and searching lenses into the atomic world. Great discoveries are just beyond their reach. But the humans will soon know the truth about us. A thousand years! And what wonders they will know!"

"But they want to hurt us," Nega, while clothed with her new-born courage, was skeptical of altruistic thoughts.

"My dear Nega," purred Posi very softly, "the humans don't want to hurt us. They don't know we have a form of life and have feeling. The great Mechanic must have considered that, for as you know, we electrons are very hard to destroy. We are infinitely more tenacious of life than humans. Why, Nega, do you know that if the Earth's surface became only one hundred degrees centigrade in temperature for but a few moments, all human life would be wiped out. They can't stand much heat or cold. Just think, if the temperature of the sun fell below thirty million degrees centigrade, humans would freeze to death. But, my sweet, this great race of humans, with their limitations and certain advantages, are the rulers of the universe. Here comes a bit of news."

Nega considered well the words of Posi. So this was to be death! She was very young—as electrons calculate. It was hard to die. Looking about her nucleus, she observed that all the electrons were quite composed, although each knew of the approaching ordeal.

"I want you to know I really love you, Nega!" suddenly and tenderly impulsed Posi. "I've had strange adventures on many planets. I've met many negative electrons, but you, my lovely Nega, are the most beautiful and wonderful of all."

"For once I believe you," sighed Nega. Then the peril of their terrible situation smothered her sentimental reaction. "Tell me about this machine the scientists are using to tear us apart. Will we suffer much pain?"

"If we are struck squarely in our nucleus with one of those terrible rays, we will fly into a lot of pieces. It won't hurt any." Posi was gallantly lying to save Nega's fortitude for the coming ordeal. "I don't know much about the devilish machine, except that the scientists have discovered a way to smash an atom with their terrible device that will shoot a fearful energy at us. It will blast us apart. It will——"

Posi's vibrations suddenly ceased, and it was plain some startling message was registering. It came.

"Great Cosmos!" shrieked Posi. "We're in the deadly machine. They're turning on the rays! Hold fast, my sweet Nega. Goodbye! Perhaps we'll live through this —goodbye."

Came a mighty blasting of searing, streaking flashes of ripping energy, sworded with millions of rending volts!

A mighty debacle of electrons suddenly crashed out of their orbits and darted fast as light with the direction of the deadly rays.

Atoms smashed—a miniature solar system of planets and suns gone mad. The disintegration of atoms indeed! The smashing of worlds—of universes!

With the first smashing ray, Posi and Nega felt themselves torn from their orbits—hurled through space.

Smash! Crash! and Posi and Nega knew no more.

Erudite scientists looked with gleaming eyes through powerful lenses. High speed telescopic cameras clicked.

"A most interesting experiment. We've got some fine pictures." The great Millikan was pleased.

The atom—and then the mighty stars! Man, just halfway between in mass and perhaps just half-way in intelligence. But man, vested with courage, ambition and a growing knowledge, will some day know the atom —and the star.

THE END

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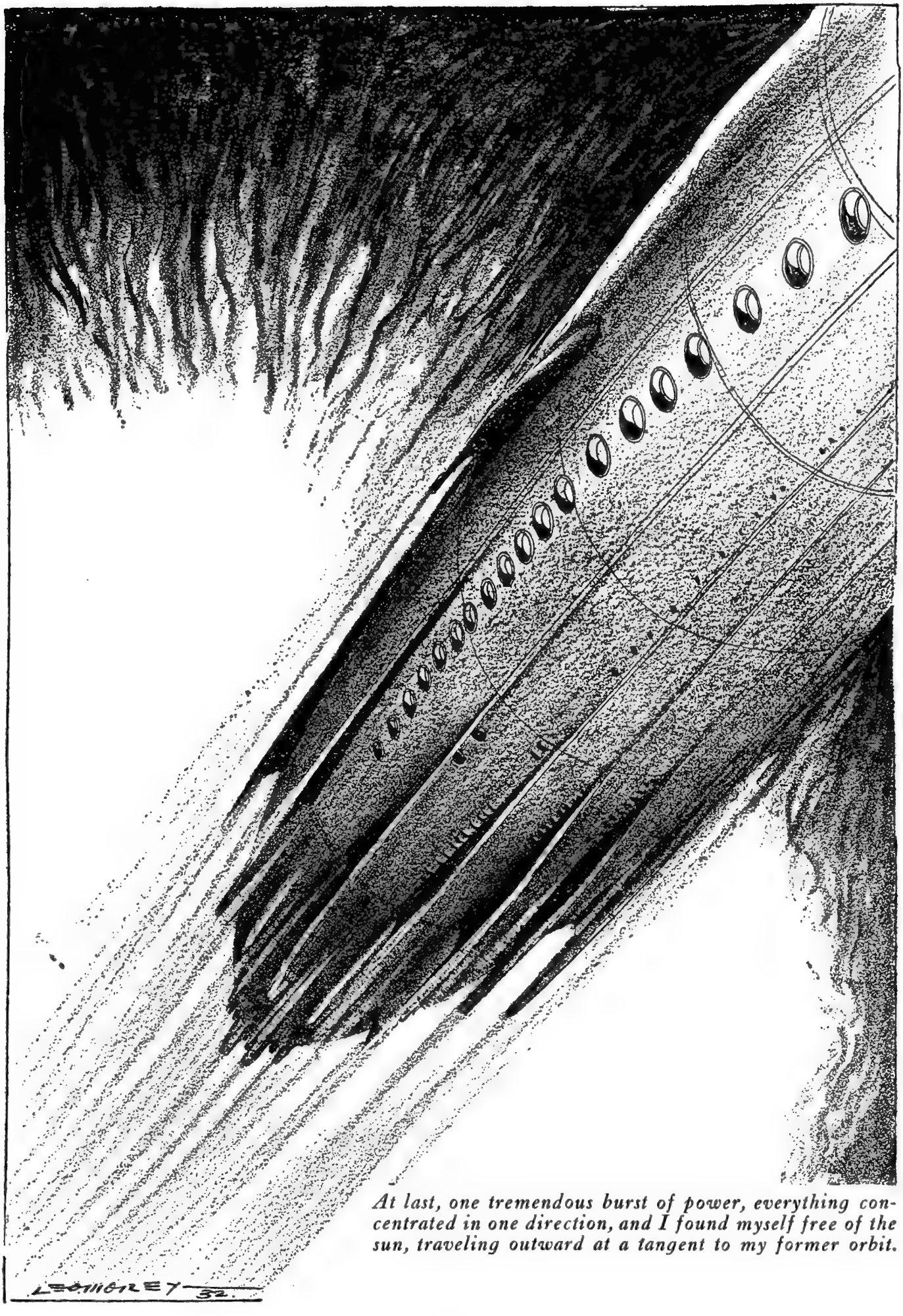


At last, one tremendous burst of power, everything concentrated in one direction, and I found myself free of the sun, traveling outward at a tangent to my former orbit.

The Lemurian Documents

By J. Lewis Burtt

No. 6: Prometheus

HERE is the last—and we think, the best—of the series of modernized sketches of characters and accomplishments of mythological fame in the fields of science. There have been many variations in the legends about Prometheus, the fire-getter, but this one is particularly plausible, and, it seems to us, remarkably convincing and vivid.

Illustrated by MOREY

BROKEN by grief and suffering, yet feeling within us the inspiration of the Holy Ones—to whom be honor—compelling us to live on and to carry out their divine purpose, I, Deucalion, with my wife Pyrrha, prince and princess of Mur, and priests of the Holy Three, do here record the history of the great catastrophe which has utterly destroyed civilization and removed a continent from the face of the earth—that awful cataclysm brought about by the evil passions of wicked men.

For those yet unborn we make this record, knowing that in the ages to come it will be discovered and read. May those who find it, and those who read it, heed its message.

To make clear the last events of our history we must perforce recall those of some years back, and the discoveries of our honored leaders, Prometheus (Pro-Mat-Tnu) and his younger brother Epimetheus (Ep-Mat-Tnu).

By the end of the thirty-second cycle of our empire we had reached a stage where it seemed that no further progress in science or mechanics could be made, unless the secrets of atomic power should be rediscovered. Our land-cars thronged the ways, our atmosphere-ships filled the air, our antigravitor cruisers journeyed to other planets. Our people were prosperous, want was unknown, all was well nigh perfect, but still man's ambition urged him ever forward to new discoveries.

Head of the Council of Princes was the scientist, Prometheus, nephew of the All Serene. This great leader, with his brother Epimetheus, resolved to devote his life to the conquest of the atom, the unlocking of the vast stores of its energy, and the consequent abolition for all time of laborious tasks, thus setting man free to progress and advance without further handicap. Could they have foreseen the events that were to result from the misuse of their great gift, it is certain that they would never have undertaken such a task. Their discovery should have been the greatest blessing ever bestowed on man, yet, because men's hearts were not fitted to receive such knowledge, it became the scourge and destroyer of our race. Alas that the work of two such noble men should have wrought such ill!

Their story is best told by quoting extracts from Prometheus' own journal:

"Twice seven years today since first we started to wrest from the atom its secrets. Twice seven long years, and still the tiny particle withholds its power from us. Sometimes we fear that it is not permitted to men to delve so far into Nature's fastnesses.

"I wonder, do the Holy Gods deny this to us for some wise purpose? Surely not. Such power would release men from their last bondage. Man would be free indeed—the true ruler of his system of worlds. Surely the Holy Ones are not jealous as the ignorant suppose! Such Wisdom as theirs must be far above such pettiness! . . .

"Another glimmer of hope. My brother today succeeded in accelerating, by the veriest fraction, the disintegration of the ninety-second atom.** Are we at last on the right road? . . .

"Failure again! More seasons of experimenting, yet neither of us can increase the action more than a use-

**The element we call Uranium. Atomic number ninety-two.

lessly small amount. These processes go on in the sun at enormous velocities, releasing untold power. Why, then, cannot we speed them up on this world to a sufficiently rapid rate? Why, when we are so near to our goal, must we fail again and again? . . .

"Today Epimetheus and I decided that the only possible thing to do is for one of us to study the solar reactions at close range. How, the Gods alone know! What vehicle can we devise to carry us so close to the flaming sun and yet protect us from that awful, searing heat, from that terrible dazzling light, above all from that penetrant, murderous radioactivity? It is impossible!

"As I write, my wonderful brother reads and smiles. I know that smile. It means that the word 'impossible' has no meaning for him. I wonder—— . . .

"Another year gone by. Tomorrow I venture forth on the maddest quest ever imagined by that dreamer, man. The 'impossible' vehicle is completed. Epimetheus is as cranky as a priest whose miracle has gone wrong. He pretends it is overwork, but I know that it is because he fears for me and would take my place. Yet he knows that he must remain. If I never return, there will be little loss. I am past my prime. I am alone save for him, and the rest of the world will scarce miss me.

"On the other hand, if I should let him go and he should die, the world will lose a young and brilliant genius. Also, though he has not yet learned it, the young Pandora loves him as he loves her. Why, then, should two lives be wrecked if one will suffice? Even so, I wonder will the beautiful, thoughtless, lovable Pandora make him happy, or will her careless recklessness bring untold grief to him—to them both? The Gods alone know, and no man may foretell the fate of another.

"I am hiding this diary from my brother. He can find it after I am gone. Before I go he must not know of my cowardice! Yes, to myself I must admit it. I am afraid—afraid unto death! No, it is not death itself that I fear. I dread the thought of the awful lingering agony that may be my lot before death. I dread the thought of the days of suffering that must be mine even though I return safely.

"What if the 'ablaston' shell fails to hold back the terrific heat? What if the antigravitors are not powerful enough to hold me from falling into that inferno of fire, the sun? What if the insulating layers fail to check those penetrating rays of death? What if I return only to live and suffer for years from some radiant destruction?

"I Must Stop! If I think, I shall go mad with fear! . . . And my brother looks on me as a hero!! . . .

"Today is the forty-fifth day (Earth time) of my voyage. Forty-five weary, monotonous, lonely days. Nothing happens, nothing changes, except that the great sun grows steadily larger and brighter. Yesterday came the first break in the awful loneliness. I passed close to Planet One—the little one named for my predecessor, Mar-Kurus.

"A terrible world it is, scorched to a barren mass, uninhabitable, dead! I approached within a million miles, but could detect no slightest sign of life. An unfriendly world it seemed, yet to be near even such a world as this made me feel less isolated in the immensity of space.

"Only a few days more and I shall reach my destination. Then I shall have work to occupy me. It is strange that the one thing that appalls me—the lonely monotony—should have been the one thing I never feared. I think if I had known what it meant, I should not have had the courage to venture on this mad journey.

"No longer do I dread the possibility of suffering and death—nothing could be worse than the horror of these past days! At least I shall have plenty of occupation, and then perhaps I shall be able to sleep again.

"I am glad of the routine observations. They occupy a little time. I have devised many new and unusual types of observation and calculation. They have at least preserved my sanity—but one cannot mathematize forever.

"The ship works perfectly. The lack of gravity no longer bothers me, but the silence during the long days when the rockets are idle, is terrible The meteor-finders make the only breaks. Occasionally, a rocket tube will flame into action for a short time. Then I generally pull myself over to a window, but rarely do I catch even a glimpse of my stony visitor.

"The heat is becoming oppressive. I must increase the activation of the 'ablaston' shell. . . .

"At last my destination is reached! Two million miles below me flames the most terrible furnace imaginable! The great disk of the sun fills the heavens. Around me is a sea of glowing light—the zodiacal light, that nebulous belt surrounding the great sun—supposed to be due to sunlight reflected from meteors in the ecliptic.

"My insulators are wonderful, yet they cannot entirely check the awful forces flaming out towards me. The heat is unbearable, even with the refrigerators at full activation. The light is blinding. I work with all windows covered. I am wearing a double light-insulating mask, and yet I must close my eyes before I even turn in the direction of that immense furnace. The air in the cabin glows with a violet hue. It must be completely ionized!**

"Not for long can I endure this heat, this light, this radiant energy! I want to die! Ah, Gods, How I want to die! Yet I must endure! I cannot fail my brother! . . .

"Three days of this agony have I suffered! My skin is burnt and almost black. My eyes burn like twin furnaces. I cannot eat, and today I cannot even drink the scalding water. One last set of observations and I must leave! May the Gods grant me success even at this final moment! . . .

"I think I have it, but I am too exhausted to care. . . .

"At last I am on the way back to earth. I thought I could stand no more after those agonizing days above the sun. I know now that I had not then reached the limit of human endurance. My last observations have, I think, given me the key I sought, but I am yet too weak to examine them.

"I had forgotten that the commencement of the return journey would mean hours of concentrated mental effort, and I nearly delayed too long.

"Never can I describe the exquisite torture of that struggle! Even with all my repellers and all my sunward rocket tubes exerting every bit of available force, it seemed impossible for me to break from that terrific

** At this distance—two million miles—from the sun the intensity of radiation—heat, light, radioactivity, etc., would be at least two thousand times as intense as at the distance of the Earth. Not only that, but there would be no atmosphere to reduce the power of the various rays, so that this figure may well be much too low an estimate. The effect varying with the square of the distance and the sun being about 93 million miles from the Earth, we have the proportion: The square of 2 is to the square of 93 as 1 is to 1,000 about.

gravitational pull. Should I never tear loose from the orbit into which I had forced my ship? No, I could not do it! In despair I sank back in my control seat. WHAT must be the end? Must I forever circle the sun? . . . I think I fainted. . . .

"When next I realized that I was conscious, it was as though a wave of agony had seared into my very brain, but with it came an awakening of my faculties. At last I realized my stupidity! Never could I pull *directly* away from the sun, but, by increasing my orbital speed, I should gradually increase that orbit's diameter until my motors could again take control of the ship.

"Why I had not thought of it before, I cannot tell. I suppose the strain had dulled my faculties.

"Eagerly I grasped the controls. A burst of flame leapt out from the side of the ship. Slowly, oh so slowly!, the speed indicators crept upward. Only a tiny gain, but enough to tell me that I could win free *if* I could only retain my senses.

"Then I began to rotate! I should have expected it and prevented it. However, it did not necessarily mean failure.

"Hour after hour I fought, now sending a blast from one tube, now a stream of fire from another. Now I would increase my speed a little; now I must check my rotation; now again I must try to drive outward from the sun.

"At last, one tremendous burst of power, everything concentrated in one direction, and I found myself free of the sun, traveling outward at a tangent to my former orbit. Then, the strain relieved, I sank again into unconsciousness. . . .

"I must have drifted thus for several days. (My time recorders are no longer working evenly. I think the intense magnetic field of the sun must have damaged them.)

"When I awoke, I was traveling at an immense speed. My rockets had continued to force me forward until their charges were exhausted. I blessed Epimetheus' wisdom in insisting on dividing the fuel chambers into compartments, so that now I still had most of my reserve fuel left. Had we used *my* design the rockets would have flamed on until all the fuel was gone, and now I should be helplessly stranded in illimitable space.

"As full consciousness returned, my body seemed to become a focus for all the torture ever devised. With a tremendous effort I struggled to the lockers and got food and drink. Then I reviewed my position.

"I was already outside the orbit of the first planet, but on the side *remote* from the Earth. A check of my fuel showed barely enough to take me home had I been on the earthward side of the sun.

"With infinite effort I eventually forced my mind to grasp the situation. There must be a way! Gradually my intellect began to function more normally. I compelled myself to make observations and calculations. My only chance was to drive my vessel into an orbit which would bring it round towards the earth. Much power would be needed for this manœuvre but, once established in the orbit, I could drift with idle motors until the time came to swing outward once more.

"The change of course occupied about a day. Now I am a new planet drifting around the sun, but on account of my great speed, I am spiralling outward. When I reach the point at which I must again change my course to reach earth, I shall be well outside the orbit of the second planet.* This will take me about sixty-six days.

"No longer do I fear the awful monotony, for now I am going home. For sixty days and more I need do nothing, need not even make an observation. For sixty days I can *rest!* . . .

"Tomorrow I must break out of this orbit and head for the earth. The long rest has done me good, but I fear that I am permanently injured. The pains are less intense now—or else I have become accustomed to them—but I fear the solar rays have caused changes in my body which cannot be remedied. My body is slightly luminous. There must be some form of radioactivity operating in it.

"My fuel is very low. Only by very exact plotting of my course can I reach Earth safely, and with faulty time recorders this is a problem indeed.

"My food is nearly all gone, too. The heat and radioactivity destroyed a great deal of it. If I am careful, I think I can last out. I have no appetite anyway. I just eat enough to keep myself alive.

"My longing for earth has become intolerable. For long periods I lie and weep for very misery. My whole body is unhappy. I hope I shall not live long after I reach home. . . .

"My fuel is nearly gone. Half a million miles yet to go. If I manœuvre very carefully and strike Earth at a tangent, I think I shall have enough to stop me before I enter the atmosphere.

"I ate my last food today. There is water for two days more. (My purifiers are broken, or water would be plentiful.) The great problem is to make my remaining fuel do sufficient work. The moon is on the far side of the earth, so I cannot use its pull as a brake. . . .

"I am *saved!* My hand will hardly guide my stylus! There below me is Rapani! My radivisor will not work, but in my telescope I can make out the crowds gathering at the space-port. They have seen me, I know. I am no longer alone!

"I *wish* they'd go away! I don't know if I can land in the port, and I don't want to kill anyone.

"Only a few 'anars' longer now. I cannot write more. I need both hands for the controls. . . ."

* * * * * *

The excitement in the capital when the great cigar-shaped space-flier was sighted was intense. As the flier slowly descended, those watching could see by the erratic movements it made, that all was not well.

Without hesitation, the All Serene ordered two fast cruisers to attend the flier, to grapple on to it, and to bring it safely to land.

As it approached, the crowds gaped in astonishment. The outer shell was an unbelievable sight! The casings were twisted and fused, the windows darkened and scarcely even translucent, except for one or two small ones which had obviously been given extra protection. Could it be possible that Prometheus had survived such punishment! It must be so, for no space-flier could have brought itself back from the sun.

Excitement rose to fever heat!

GENTLY the two cruisers lowered the veteran ship into her own cradle. Then the All Serene himself, with Epimetheus and a group of nobles—among whom,

* Venus. Mercury is the first planet counting outwards from the sun; the Earth is the third one.

in some remarkable way, the young Pandora had managed to include herself—made for the gangways.

They could not see within, but, thank the Gods, they heard movements. The faint whine of motors sounded, and gradually the great valve unscrewed. Not more than a few moments could have passed, yet it seemed like days. Then the valve swung outwards and out crawled—was it a man? Could this blackened, distorted, crawling thing be the noble Prometheus?

Horror stricken, they heard his feeble greeting, but before they reached him, he had collapsed into utter unconsciousness.

"Take him to the royal apartments," was the immediate order of the emperor, and, turning to the commander of the escort, "Examine the space-ship, place a guard over it and bring the records to the palace."

Marveling, the captain entered the ship. The fused appearance of the outer shell had led him to expect chaos within, yet not a thing was out of place. Signs of damage there were, truly, but so little was there destroyed, that he could not believe his own eyes.

Taking the records, and all other writings he could find, he went slowly out of the cabin and down into the power room. Here the signs of injury were greater. The antigravitor motors showed evidence of tremendous overloading. The rocket tubes were scorched and discolored by the fearful heat of the prolonged maximum discharges. The whole place was highly magnetized, and he wondered, with a great amazement, how these machines could possibly have kept going under the tension of such a field.

Although there were none save his orderlies to see, he took off his helmet and stood bareheaded in silent homage to the genius and courage of the designers of such wondrous machines.

Meanwhile the silent, distorted form of the voyager was taken swiftly to the most luxurious suite of all the vast palace. His brother, white faced and half demented with grief and horror, would not leave his side for an instant. He alone fully realized that his beloved brother might only rally for a few minutes before he passed into eternal rest. If so, he alone would be able to understand the message—he alone of all the world would be able to carry on the work—Prometheus had succeeded.

But Prometheus was not to pass so soon. After a while he opened his tortured eyes. Catching sight of his brother's face hovering over him, he reached out a hand, which was immediately grasped.

"I'm all right now—not alone now," he murmured faintly. "The gravity—not used to it—away from it long time—sleep two days—be all right." And he turned over in the first untroubled sleep he had known for nearly half a year.

Not a word as to failure or success had Epimetheus gleaned from his brother, and for the next few days he and the other anxious watchers were forced to curb their impatience. Their code of honor forbade them to examine the records while Prometheus still lived.

Time and time again Epimetheus would go to the Chamber of Records and stand gazing on the mysterious box. Only those nearest him could understand the battle that was raging within him between desire and honor. Sometimes, when he was in this mood, the young Pandora would come silently up to him, and, resting her hand on his arm, would lead him gently out into the gardens, her old carelessness seemingly gone forever.

On the fourth morning Prometheus awoke, his mind clear, his body rested. Immediately his attendant brought food and drink, the first real meal that Prometheus had tasted since his departure. Weak as he was, he tried to rise, but, failing, sank back with a sigh.

"May I help, Highness?" came the voice of the attendant.

"Yes. Summon the Prince Epimetheus, and notify the All Serene that I am recovered."

"It is already done, Highness," replied the young lad.

Even as he spoke there came a whispered challenge at the door, and swiftly the hangings parted. In the doorway stood the Prince Epimetheus and the All Serene himself.

Hesitantly they approached the couch. Prometheus looked up and, with a twisted smile, tried to make the royal salute, but before he could more than raise his hand, the emperor had grasped it in the grip of a brother.

"Friend Prometheus," he said gently, "in the name of the Empire of Mur we offer you our thanks and gratitude for your noble work and sacrifice. Whether success or failure has attended your mission we know not yet, but whatever the result, we honor the man who has risked his all for his empire."

Unable longer to contain himself, even in the presence of his emperor, Epimetheus threw himself down on his knees beside his brother and embraced him as a mother would a child Smiling weakly, Prometheus relaxed into his brother's embrace, and after a moment said quietly:

"Majesty, I thank you, but my brother must share equally in my honors, for he it is who made the journey possible. I have suffered torments such as the gods of evil alone could devise, the torments of heat, of thirst, of the effects of radiance undreamed of by Earth dwellers. Above all I have suffered the agonies of fear, of utter loneliness, and of semi-madness. My body is broken. Never again shall I walk around the cities of our fair land, never again shall I be free. The Gods, whose secrets I dared to probe, have chained me. My body is burned with the radiant fires which are now kindled within my vitals. See!" To the attendant he ordered, "Draw the shades and darken the room."

Astounded, the watchers stared at Prometheus. Gradually, as their eyes became accustomed to the gloom, they perceived that his body glowed with a ghostly radiance, blue-white, cold—awful.

"Yes, friends," he continued when the shades were again opened, "my body is radioactive and is slowly disintegrating. My organs are decaying and I can no longer completely control my body. No," he continued, seeing the look of pity on their faces, "I do not suffer much now. The intense agonies are over and there is nothing now but the helplessness and the weakness. I shall soon pass to the land of the Gods. A few seasons are all that are left to me in this world, but I have no regret. I have lived my life. I have done my duty, and" with a note of triumph, "I have wrested their secrets from the very Gods themselves!"

The look of rapturous joy on the drawn face of Epimetheus was itself reward enough for the broken voyager. Weakly he continued:

"My records will give you all the facts you need, my brother. There is yet much to be done before the secret of power is completely mastered, but the key is there in my notes. Take it, use it, finish the work, and oh!

brother, work swiftly that I may see it before I go."

He paused, looked up, and, seeing the unrestrained tears coursing down their cheeks, he went on, "Weep not, friends, I shall go to my rest gladly. I have accomplished the greatest deed that man has ever attempted. My life is complete."

Torn between joy and sorrow, the king and his young companion stood silent, unable to utter a word. After a long pause Prometheus spoke again. "All Highest, I have a favor to ask."

"No, my friend," came back the voice of the emperor, "You ask no favors. You *command* as your *right*. Two days ago the royal proclamation went forth. Henceforth, until your passing (for we already knew your fate) your word shall be law throughout the land, and not even the word of the emperor combined with that of the Council of Princes, not even the dictum of the High Priest himself can gainsay it. Honorable Prince Prometheus, we await your commands."

"And yet," added Prometheus whimsically, "my word in this case is not so omnipotent as you would think, for it concerns a woman's heart. Will you request the noble Pandora to come to me? Please offer my apologies for my inability to go to her."

Wondering, Epimetheus gave the order. What did it mean? His brother spoke of a woman's heart, and then had called for Pandora. Did Prometheus also love her? Could he give her up even to this heroic brother? A few moments of bitter struggle, and then—his head went up. As a conquerer he stood before the man he loved, and waited.

PRESENTLY, shyly and with some hesitation, the young maid entered. With a cry of love and pity, she ran to the bed and, with tears, embraced Prometheus.

Gently he returned her embrace, then, with one arm still around her waist, "Pandora, dear, your greeting is very sweet to me, but tell me, have I seen and guessed aright? Is it not true that you love my brother?"

Blushing deeply, the girl looked down into his face. As she gazed, a great understanding, a great admiration, a great wonder and a great happiness came to her. In a flash she knew that this great hero too loved her, loved her and yet was freely giving her up to the man she loved

"Yes, I do," she whispered, "But Prometheus, my friend and brother, I have a great love for you also."

With a brilliant smile she slipped from his embrace and came and stood by the side of Epimetheus, whose expression was one of amazed gladness.

"Beloved brother," went on Prometheus, "a few moments ago I let you think that I intended to take Pandora from you. I saw your struggles, and I saw too your noble conquest of yourself. My brother, you are more than a prince. You are a MAN!"

He turned to the emperor, "All Highest, it is within your power as Emperor and Priest to join these two lovers in marriage. Will you complete my happiness by doing so now? They can have an elaborate public ceremony later, if Pandora wants one," he added mischievously.

With a glance of understanding, the emperor signalled to the attendant. "Go, summon the Empress, the High Priest, and the parents of the noble Pandora. Also," he added in a whisper, "instruct the 'Chief of Communications' to sound the general call and have all radivisors tuned into this room in one hour, to witness this marriage."

Turning back to Prometheus he continued, "Your Highness will, I know, wish to delay for an hour so that the Empress and the parents of our lovely Pandora may attend the ceremony, hence my alteration of your command."

Prometheus, now almost exhausted, nodded his agreement.

"Oh, look!" suddenly exclaimed Pandora, "Here we've been talking and arranging things all this time, and that poor man hasn't had a chance to eat his breakfast. Let's go and leave him in peace for a while. I'm going to change my frock anyway," she added mischievously.

The ceremony of marriage was, on account of the weakness of Prometheus, made as simple and short as possible. Only those few, who were needed, were allowed in the room, and the chief actors were not informed till afterwards that the whole nation was watching by radivisor.

Stepping forward, the emperor signalled the two to kneel one on each side of Prometheus' couch. Then, in the words of the ritual, he commenced:

"Do you, Epimetheus, love this woman with your whole heart, and is it your wish to dwell with her and to protect her as long as the Gods shall grant you life?"

"I love her and I wish to dwell with her and to protect her," came the quiet reply.

"And do you, Pandora, love this man with your whole heart, and is it your wish to dwell with him and to be his helpmeet and companion as long as the Gods shall grant you life?"

"I love him and I wish to be his companion," came back clearly the musical voice of the girl.

The monarch signalled to Prometheus to join their hands. Then, placing his own hand above the other three, he pronounced the vital words: "I, Par-Man-Actu, Emperor of Mur, Priest of the Holy Three, who are One, do here declare that this man, Epimetheus, and this woman, Pandora, are henceforth to be as one being equal in love and in authority."

He signalled to the High Priest, who pronounced the special benediction used only at the marriage of royal princes:

"May the Holy Three, the Creator, the Director, the Preserver, whose highest attributes are love and faithfulness, bless your royal union and grant you long life and all happiness."

Then as all knelt before him, they repeated with him the sacred words of adoration:

"For this happiness, and for all good, Our Gods, we thank Thee."

PROMETHEUS lived about two years after his return from the sun. As he had realized would be the case, his body was slowly disintegrated by the induced radioactivity. Epimetheus devised for him a sort of traveling chair, in which he could drive himself about the palace and even out into the city. When he was in this chair, just as when he was in bed, a powerful magnetic field was kept surrounding him, as this seemed to relieve him and give him comfort.

At times he would ride down to the laboratories where Epimetheus and Pandora worked. Grotesque figures they were, always encased in their leaden suits while working. Only Prometheus himself dared venture into

the inner chamber without such a shield. The rays could no longer do him any more injury.

Many times he was thus enabled to make some delicate adjustment which, in their clumsy armor, the others could not manage. This was one of the few pleasures still remaining to him. It made him feel that he was still needed

Never for an instant, day or night, was the prematurely aged man left alone. It was his one dread. The experience in the space-flier had left on his mentality an ineradicable scar.

As he became less and less able to get about, his brother and sister devoted more and more time to him, until in the end, he begged them not to delay the work on his account, as he felt that he might not live to see its completion. Hearing of this, the emperor and empress themselves began to assume this task, feeling that it was something they could do to show their love and respect for him.

I, DEUCALION, who write this record, speak with authority of these things, for to me was given the honor of serving that most noble man as his personal attendant.

No, friends, never was it regarded as a menial task. Rather was it accounted a great honor. I know not how many nobles and even princes would have given half their fortunes to take my place.

My appointment was, in the first place, a stroke of good fortune. At the time when Prometheus was brought to the palace from his ship, it happened to be my turn of duty as "Royal Messenger" to the Empress. When the message arrived that the best suite was to be made ready, she instructed me to see personally to the matter, and so I was the one to meet the procession.

As I was assisting in placing Prometheus in his bed, he roused to semi-consciousness, looked around in terror, then, seeing me, he muttered, "Not alone now—stay with me, Captain."

I was only a fledgling lieutenant, but, hearing this, the All Serene immediately ordered, "Obey his commands. Stay with him as long as he may need you. Captain he has named you—captain you are."

And so, by the favor of the Gods, I became attendant to the noblest of men. Soon I came to love him as a father. How can I write of his goodness, of his wonderful cheeriness, of his infinite patience? Despite his afflictions, he was to me father, brother, instructor (and what wonders he taught me!) and friend.

One incident will show why I loved him. One day I made bold enough to request that he would allow my sweetheart, Pyrrha, to visit him for a short while.

"Why!" he exclaimed, "You never told me you had a sweetheart! Certainly I must see her. Will you request her to be here tomorrow at this time?"

In anticipation of this event, he had his valets dress him in his most elaborate princely robes, and even repolish the already shining woodwork of his chair. It might have been his own sweetheart who was coming!

When she came, she could scarcely speak for shyness, but going to him, she kneeled in homage and kissed his hand, as his rank and dignity required.

"Get up, child," he remarked quietly. "You need not do homage to me. Your affianced is my friend and you are his equal, so will you not treat me as a friend and an equal too?"

The gentle tone of his words put her at ease immediately.

"Come, sit by me, child," was his next request, "and tell me all about yourself. You know I cannot get around enough to learn things for myself. Tell me everything. Tell me when you are going to marry that young scamp, Deucalion, and take him away from me."

"Oh, Prince!" she exclaimed, "Never will I take him from you We shall wait until you no longer need him, and——" She stopped in confusion, realizing just how her words must sound.

"So, little friend, old Prometheus stands in the way of your happiness, does he?" came that quiet voice. She hung her head, and for very shame could not reply, and I alone saw the merry twinkle in his eye.

"Now, child, let us see if we can't remedy the situation?" he went on, "I can't have you two desiring my death—even if I do desire it myself. Suppose now, that the pair of you just go ahead and get married——"

At this, Pyrrha looked at him in astonishment.

"But——" she stammered.

"But what, my dear?" came that gentle voice again, "I suppose you're going to say that you can't afford it on a captain's pay? Well, that's all settled. Tomorrow your Deucalion shall be a Full Commander. Now, how soon do you think you can be ready for the wedding? Understand now, you're not going to take my man away from me. I'll be needing *two* attendants from now on, so you'd better get him to initiate you into your new duties."

Chuckling to himself like a boy, the old man called to me: "COLONEL DEUCALION, will you please see that your colleague is well instructed in her duties?—And, by the way, I should like an invitation to the wedding."

He lived long enough to see and test the first successful atomic motor, and then, as though his work was finished, he just took to his bed.

For nine days we four, Epimetheus, Pandora, Pyrrha and myself, never left him. Always, day and night, there were two of us near by—always at least one in the actual room with him.

On the afternoon of the last day he called me to him and, speaking very faintly, said, "Fetch my brother and the two girls, and send also for the All Serene and his beautiful empress."

Sadly I obeyed, for I knew it was the end.

When we were all in his room, he looked around with one of his frequent smiles. Then calling each in turn to him, he greeted us with the double handclasp of the royal farewell, and gave to each the kiss of friendship. Then——

"My beloved friends, I am leaving you at last. The Gods will reward you for all your wonderful love and care for me.

"Sorrow not, but rejoice that at last I find release from this worn-out body of mine. You, my brother, can scarcely remember our little sister, my twin, whom the Gods saw fit to take to themselves when she was a child. Her memory has always been a guiding star in my life, and now I go to rejoin her. Wish me joy, my dears. May the Holy Three keep you all. Farewell!"

Calmly he dropped his hand, which had been raised in blessing. Slowly he closed his tired eyes. A look of unspeakable peace and joy lighted up his worn face—and our hero, our friend, had gone to his beloved little sister.

AFTER the period of mourning was over, Epimetheus resumed work, taking me into the laboratories as his assistant. For some five or six years we worked together, he and I doing most of the experimental work, while his wife, Pandora, kept the records.

The originals of all notes were sent to the "Chamber of Records" for preservation, but Pandora kept in the vault of the laboratory copies of everything of importance.

These vaults were of strong steel and were protected by a paralysing ray, which shot into action on the near approach of any person. The controls for these rays were concealed in the laboratory itself, and were known only to the three of us.

When the use of atomic power was at length made practical, Epimetheus caused a special session of the Council of Princes to be called.

He laid before them the work already done and showed them all the possibilities for the immediate future. The picture he drew was that of a land of almost ideal happiness. "But," he continued, after picturing this paradise, "there are also great dangers. Honorable Sirs, if this power is not carefully guarded and its secrets kept in safe hands, it may become the very destroyer of our race, if not of the world iteslf.

"Let us then not give these secrets to any but the fewest possible, and let those few be chosen from the most trustworthy among us. Let them swear the oath, that may not be broken, that they will pass on their knowledge to no other person without the consent of all those who have the secrets.

Discussion of this proposal occupied many days. At times the arguments waxed exceedingly hot. On two occasions members of the council almost came to blows.

At length Epimetheus invited the whole council to accompany him to witness a demonstration which he had prepared.

Away out on a lonely island he had built an atomic engine designed so that it could be used as a weapon of defense. This weapon he showed to the princes and convinced them of its power. Then he opened to view the disintegrating chambers, and showed them that it contained only a few pounds of the secret atomic fuel.

After this, he took them all back into the cruiser and bade the commander rise to a height of ten thousand feet.

"Look now!" he ordered.

In his hand was our latest triumph, a disintegrator pistol. Sighting carefully, he aimed at the crest of the island, where lay the concealed weapon.

"This ray," he explained, "will spread, at this range, to give an effective field of about a thousand feet in diameter. I shall flash it on the island, where the atomic gun is, for the time in which I can count seven."

He did so.

For a few moments nothing happened. Some of the younger princes had already begun to smile rather sardonically, when——

"See!" came the voice of one of them. On the crest of the hill appeared a thin column of bluish smoke.

"FULL SPEED!" ordered Epimetheus. "Get us away from here, Commander! Our lives depend on your quickness. The action is more rapid than I thought!"

The commander rushed to the controls. With a sickening lurch, the cruiser swung round and raced away from this unknown danger.

Scarcely had we attained full speed when, from behind, came a terrific gale of scorching wind.

Staggering to the rear lookouts, we gazed out on a magnificent, but awe-inspiring sight. The whole island was a mass of towering flames of titanic proportions. Explosion after explosion occurred. Upheaval after upheaval shook the ground.

For two whole days we flew around and watched the destruction caused by the disintegration of such a small quantity of fuel. By this time the island had been entirely disintegrated and was below sea-level.

The in-rushing waves created immense columns of steam, through which could be distinguished great geyser-like columns of upflung water.

Another day and the force of the reaction had spent itself. The water apparently acted as a check to the disintegrating force. (This phenomenon, although familiar to Epimetheus and myself, remained entirely inexplicable to us both, and we never did solve that problem.)

With a shipload of extremely thoughtful princes, we headed back to Rapani, and at once re-entered the Council Chamber. In silence the princes took their seats. The All Serene, from his gold and ebony throne, called the assembly into session and immediately demanded a vote on Epimetheus' proposal. Every hand was outstretched in the sign of approval. Not a single man dared oppose it.

So it was settled. Only we three, the All Serene, my wife, Pyrrha, and four of the princes of highest rank were allowed to know the great secret. This body of nine constituted what became known as the "Secret Conclave."

Soon, however, we learned that our enemies of the cavern world beneath us, instigated by their ruler, Plu-Ton, were plotting to get possession of our secret plans and records. A number of spies were caught around the palace and the laboratories. Once, even, we found a poor paralyzed wretch lying at the very door of the vault.

This man we brought to trial after his recovery from the paralysis. He was condemned to death, but at Epimetheus' instigation the sentence was revoked. Instead, he was branded with the sign of the Secret Conclave and sent back under escort, with a warning to Plu-Ton.

Their activities, however, continued. Once or twice it looked as though the cavern dwellers would force us into war before we were fully prepared, but each time, the widsom of the All Serene averted the tragedy.

ONE morning, we went into the laboratory as usual, to be greeted by a wild-eyed, frantic Pandora.

"Oh!" she moaned, "they've gone, and I'm to blame!"

"What are gone?" asked Epimetheus, even though he already knew the answer.

"Oh! my husband, kill me!" she sobbed. "Last night I must have forgotten to throw the rays into contact. Early this morning some premonition of evil awoke me. I went down to the vault. To my horror, I found it open and the plans gone. Kill me, my husband, I have betrayed my country by my accursed carelessness!"

"Wait," commanded Epimetheus calmly, though I could see that his iron self-control was taxed to its limit. "My dear, are you *sure* you didn't contact the rays?"

"I don't know—I thought I did—but I couldn't have, could I?" she sobbed. "None but you and Deucalion

know the secret of the switches. There could have been no one to open them."

My pity for the poor girl was as deep as that of her husband. Pandora a traitor, even unintentionally? It was incredible—yet—we both knew how that old carelessness of hers had, in the past, got her into difficulties.

No, I would not believe it! I turned to them.

"Let us make sure before we accuse anyone, Epimetheus! I cannot believe that our Pandora is to blame, and neither can you."

As a man in a trance he signified his agreement.

It was the work of a few moments only to remove the concealing panels and expose the switch cases. Anxiously, fearfully, we looked into the dark cavities. Then we turned, faced each other, and each silently grasped the hands of the others. There was no need for words. The switches were *closed,* locked into contact.

Down the passage to the vault we rushed, taking with us a ray detector. Not a flicker did it give. The switches were closed, and yet the ray was dead! Pandora was *not* to blame. Our enemies had outwitted us.

"Let us check up and see how much they have taken," was my suggestion.

Alas! it was worse even than we had feared. Had they stolen *all* the records there would have been tragedy enough, *but* they had left behind one record. They had all the secrets of *releasing* the atomic forces, but they had left behind the secret of *controlling* them!

White-faced and silent we stood. What would happen now? Our enemies would unlock forces they could in no way control! The fate of a world hung in the balance!

With an effort, Epimetheus turned. "Come," he said harshly—more harshly than we had ever heard him speak. "Summon the Secret Conclave, the Council of Princes, and the Council of Priests. There is no time to lose. We need every man's wisdom. Disaster undreamed of is at hand!"

At first the Councils did not grasp the awful significance of the danger. For a full half day did Epimetheus and I alternately warn, explain and plead. At last we made them understand—and then, brave men as they were, they came near to panic.

It was my beloved wife, Pyrrha, who offered the only practical suggestion.

"Let us," she said, "send a swift messenger to Plu-Ton. Let us make the sacrifice necessary to save the world. Let us even sacrifice our liberty if we must. With this messenger send the key to the power control. Let him give it to Plu-Ton without conditions, and then let him plead for peace. Surely a monarch so great as Plu-Ton will listen. He is a man, even if he is our enemy."

Wild and humiliating as the proposal sounded, yet there seemed to be no other way if any at all were to be saved.

Silently the combined councils took the vote. None had any alternative to offer, and so each member, feeling the necessity, slowly stretched out his hand in consent.

ALL in vain was our sacrifice. Too late the messenger reached the mouth of the cavern world. Even as he descended, there came from beneath a dull reverberation, a crashing, rolling roar as of the very thunders of the Gods. The men of the underworld had loosed the powers!

Warning was sent broadcast throughout the land. "Fly for your lives! Escape from Mur!" Ah! but whither? Was there *any* place of safety? The very world itself might flame into incandescence.

Indeed, for some days it seemed that this must happen. Earthquakes, volcanic eruptions, tidal waves, all succeeded each other with increasing violence. Millions perished! The land was a shambles!

Only we four knew that the earth would not be wholly destroyed. We alone knew just what would happen when the cavern roofs collapsed, and so we waited.

For full a half moon the terrible earthquakes continued. From a hundred places throughout the land great columns of living blue-white flame shot up for thousands of feet into the air. The storms were unbelievable, the volcanic action something never before experienced in history.

We four now lived—or rather dragged out a pretence at living—in our little atmosphere ship. At the risk of his life, Epimetheus had secured a few of the old records of our history, and the metal case into which we shall place them when the end has come.

Thousands and thousands have taken to the airships as their only chance of life. We can do nothing to help. We can only pray that the end may came swiftly.

It cannot be long now. The caverns are breaking in. The whole land is sinking. The end is very near.

* * * * * *

All is over. Our lovely world is no more. Over the place where Mur stood, now washes the eternal sea. Not an island remains. Even the mountain tops have sunk beneath the waves. Will they ever rise again, we wonder?

The final earthquake was indeed a thing of terror. We cannot describe the horror of it. No words could paint the immensity of it. No imagination could picture it.

High as we were at the time, the disturbance of the air almost wrecked us. For a day we were tossed about like a leaf. Surely it was only the favor of the Gods that allowed us to survive at all!

When again we were able to look around us, we saw nothing but raging waves. The land, the seaships, even the air-fliers had been destroyed. Saddest of all, our beloved Pandora had been fatally injured by a blow against one of the machines.

For five days we flew over the raging ocean. The rush of water had checked the radiant destruction as we had known it would. The world was saved, but at what a cost! All our land, every one of our people, together with our enemies, had perished utterly. Only we four remained—and one of us lay dying!

Without much suffering, Pandora passed. As she was leaving us, she whispered to her husband, "Come soon, beloved."

For a while we left him with her, then Pyrrha, feeling that he must need food and rest, entered the sacred chamber to persuade him to come out.

A few moments later, she returned to the control cabin, her eyes streaming.

"They are not parted," she whispered.

So now we two, the sole survivors of all that wonderful empire, set forth to do the will of our Gods.

Far, far towards the setting sun lies a land inhabited of men. Truly they are only at the beginnings of knowledge, but still they are men. To them, in their land of Atzt-Lan do we go. There we shall be as gods, and we

feel within us that we and our children shall lead them up the long and weary road to a new civilization.

To us has been granted the gift of prophecy. The Gods have permitted us a glimpse into the future. We see again a great and mighty empire—that which we now call Atzt-Lan. We see it develop and come to power such as we of Mur have known. We see again the finding of the secret of power. Alas! we see also that the hearts of men are not yet fitted to know such forces. Atzt-Lan, even as Mur, sinks beneath the waves.

Yet again through thousands of ages of slow growth does man struggle upward. For the third time we see a great and mighty civilization spread over the earth. Again does man rule the earth, the sea, the air. Again does he seek the secret of power.

We know that it is for this race that our record is intended. It will be found and—that it may be read, we have put in it a key to our writings, such that those who find may understand.

Further we cannot see. The fate of this third civilization is hidden from us. Will tragedy overwhelm humanity for the third time, or will the hearts of men no longer be evil?

The Gods alone know, and they keep their own counsel.

To ye who open and read this record. To all who hear our story, we address these words of farewell:

"Ye who discover again the secret of power, guard it with your lives. Let no man know of it. Use it not until you are *sure* that the evils of ambition and lust of power no longer rule in men's hearts. Hide it until man is ready to be trusted with its control. Otherwise shall destruction, utter and complete, overwhelm you, even as it did us.

From our hearts we tell you. Material power is a curse to man if the divine power of love and fellowship is absent from his heart.

Hear us! Oh! friends of the far-distant future—hear us!

In the name of our God—Your God—the One Eternal Power, whom we symbolize as the Holy Three—in the name of Al-Alhu the Creator, of Osiré the Preserver, of Kul-Kan the Director, we pray. May you at last learn the true secret of fellowship, which IS power. May your progress continue along the path of all happiness.

Farewell!

The End

What Do You Know?

READERS of Amazing Stories have frequently commented upon the fact that there is more actual knowledge to be gained through reading its pages than from many a text-book. Moreover, most of the stories are written in a popular vein, making it possible for anyone to grasp important facts.

The questions which we give below are all answered on the pages as listed at the end of the questions. Please see if you can answer the questions without looking for the answer, and see how well you check up on your general knowledge of science.

1. How many feet of lead will the cosmic ray penetrate? (See page 492.)
2. Does the cosmic ray reach the earth in full power? (See page 493.)
3. What bright, white star is in the constellation, Leo? (See page 511.)
4. Do cosmic rays vary in position in the spectrum? (See page 512.)
5. What is the composition of the helium atom? (See page 512.)
6. What is the essential difference between gold and radium? (See page 514.)
7. How large is the sun compared to the earth? (See page 515.)
8. What is the composition of an atom of radium? Of gold. Of silicon? Of mercury? Of lead? (See pages 514, 515, 518 and 519.)
9. How fast does the solar system travel? (See page 519.)
10. How is the composition of an atom calculated? (See page 520.)
11. What is the atomic number of uranium? (See page 525.)
12. Can you give a theory of the zodiacal lights? (See page 526.)
13. What are the first three planets of the solar system counting from the Sun? (See page 527.)
14. What effect would sudden reduction of speed have upon the occupant of an automobile? (See page 546.)
15. What is the critical temperature of hydrogen? (See page 550.)
16. What is the critical pressure of hydrogen? (See page 550.)
17. In round numbers how many tons of hydrogen would combine with 60 tons of oxygen? (See page 559.)
18. What is the lapse of time between two inferior conjunctions of Venus and the Earth, when the Earth and Venus are closest? (See page 567.)

Suicide Durkee's Last Ride

By Neil R. Jones

Author of "The Jameson Satellite," "The Return of the Tripeds," etc.

WHILE it is true that a definite element of excitement accrues from the danger to human life in the mad race for first place in any contest, it is not at all unlikely that races of the future will be conducted by remote control or perhaps by robots. Mad things indeed might be committed when human life is no longer in danger. But you can't always keep a real daredevil down, as witness the hero of this story. Apparently the future holds much thrill in store for coming generations.

Illustration by MOREY

CHAPTER I

The National Classic

"THE *Silver Bullet* is leading"

The shout went up from thousands of throats, and was immediately blotted out in a deafening roar as several speed demons flashed past the stands and away into the distance, come and gone in the bat of an eyelid.

It was the year 1974, and the rocketmobile speed classic was being held at Cincinnati. These races were the evolved product of the old time auto races. Rocket propulsion had supplanted the gasoline motor, and whereas the highest speeds attained forty years before had been no greater than 150 miles per hour on race tracks, and 250 miles per hour on straight-aways, 800 miles per hour was now possible with the rocket car and the new race courses.

"Is the *Silver Bullet* very far ahead?" queried one of two young men who were sitting together in the stands.

"The gauge shows the *Silver Bullet* and the *Falcon* to be running about even, George," replied Lane Cardigan. "The *Silver Bullet* appears to be enjoying a very slight lead."

"Well, the race can't last much longer, and it looks like a close fight," said George. "There's just a hundred miles left of the thousand-mile race."

"That gives the *Silver Bullet* and the *Falcon* about eight to ten minutes in which to decide honors."

"Look at Brady up there," spoke George Bradley, pointing up to the operators' stand. "See how white he is in the face. He's won the classics for the last three years with his *Silver Bullet,* and this is the closest race he's had."

"The *Falcon* sure can travel."

"I was never very fond of Lynn Brady," observed George. "He's too smooth to suit me."

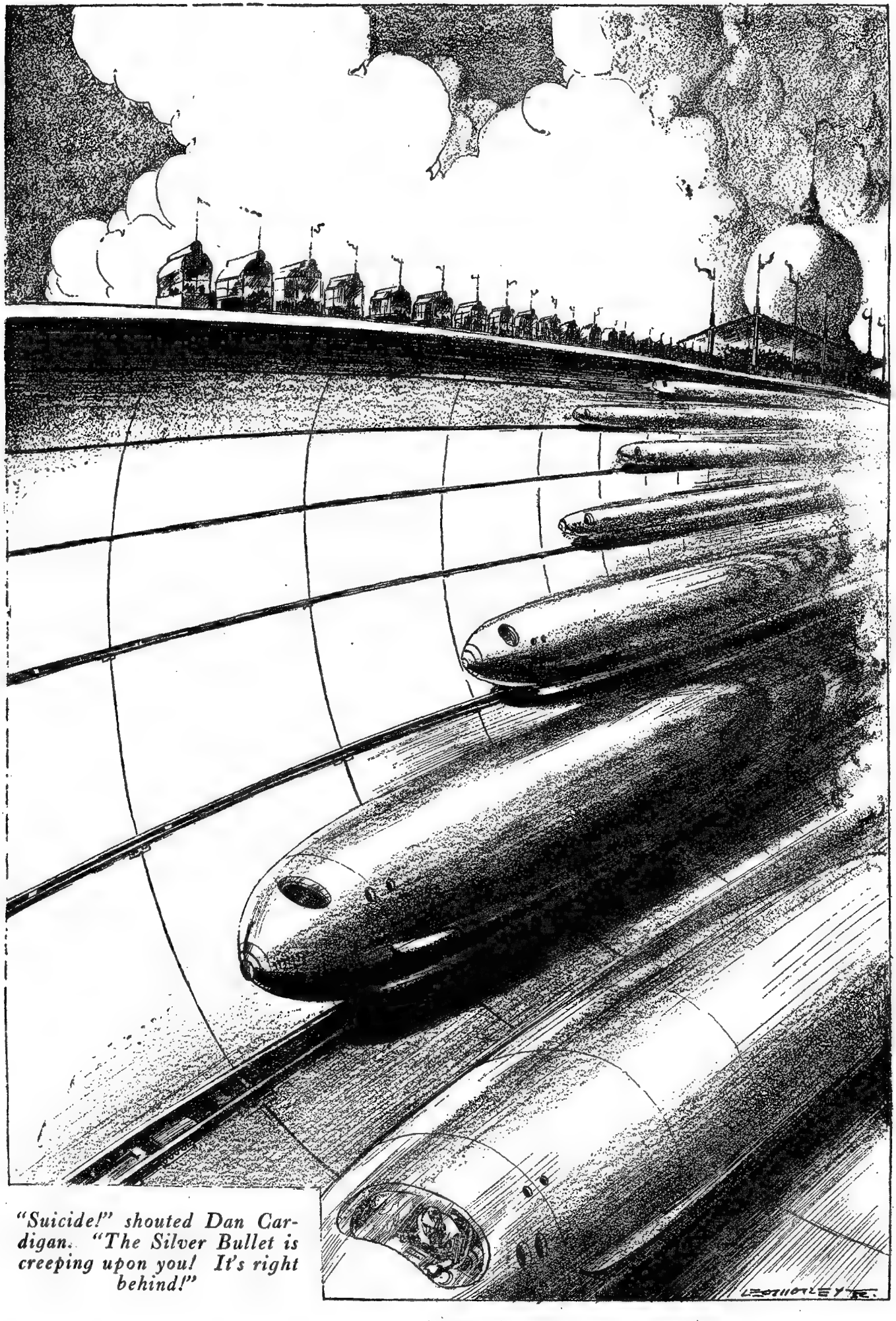
"To some people," said Lane, "the unexplained case of the *Comet* some two years ago cast a shadow of doubt upon him."

"Oh, you mean the racing car whose mechanism failed in such a strange manner during the race two years ago?"

"Yes. Brady won that race, and the *Comet's* failure appeared to certain individuals to be more than a twist of coincidence. The *Comet* was Brady's strongest opponent and the betting was even money between them."

"I remember," recollected George. "The *Comet* held a fair lead upon the *Silver Bullet* during the middle of the race when suddenly it ceased to function."

"Then everyone—"



"Suicide!" shouted Dan Cardigan. "The Silver Bullet is creeping upon you! It's right behind!"

A terrific roar interrupted their conversation as one of the mighty rocket cars swept down the long steel lane of its racing channel.

"It's the *Moonbeam!*" exclaimed Lane. "The car should make third place easily!"

"But there's no chance of it making second—too far behind."

"The *Falcon* and *Silver Bullet* are now running neck and neck!"

"Who owns the *Moonbeam?*"

"Jackson!"

He'll make third place sure enough."

"That leaves seventeen others."

"Sixteen," corrected Lane. "The *Lone Star* broke through its track on the north curve."

"Oh yes, that would leave but sixteen, then."

"Here come the two leaders again!" yelled Lane.

Down the cylindrical tracks came the contesting rocket autos like two blurred shadows. A newspaper wit had aptly termed them "racketmobiles," for they certainly deserved the pun. The vibration of the rocket discharges was terrific, and the humming of the steel guard rails rang in the ears of the spectators.

Like flashing meteors the two cars were past and out of sight, their roars fading away into the distance. In the operators' stand of the radio-driven rocketmobiles, two nervous drivers directed their whirlwind charges. Brady bit his lip and reluctantly eased up the speed of the *Silver Bullet* as it neared the farther curve. A failure to have done so would have sent the *Silver Bullet* crashing through its retaining tracks, leaving the *Falcon* to finish as winner. Many a race had been lost in this manner.

"They made that last lap in two minutes!" exclaimed George, watch in hand.

"That's hitting an average of 750 miles an hour!" cried Lane.

"The *Falcon* leads by a short margin of distance!"

"I'll bet the lead was made by chancing speed at the curves!"

"If they keep that up, I can see where one of them comes in all alone, an easy winner!"

"They're making a gamble out of it!"

"Brady would do that before losing the race to the *Falcon!* He'd rather jump the tracks!"

Anybody's Race

THREE laps, each of twenty-five miles remained. The next time that the two speeding autos passed the stands, the *Silver Bullet* led by a scant nose.

"This is a race!" cried Lane joyfully.

"Two more laps!"

On through the distance to where the north curve lay some nine miles away, the flashing rocket cars sped, each vainly attempting to establish a safe and substantial lead. Like magnets they clung to one another, neither relinquishing the supremacy the other desired. It was a bitter fight.

"Watch the gauge!" shouted George, making himself heard to his chum above the din of the yelling multitudes. "I've got a hunch one of those autos is going to drop out of the race at that curve!"

Breathlessly they watched.

"They've made it! They're past the curve!"

The rocketmobile innovation at the race tracks twenty years ago had carried many reforms into the race track rules. It had been a year by year evolution of the tracks and cars. First of all, with the tremendous increase in the speeds gained by rocket propulsion, the cars were finely streamlined and the curves banked at right angles to the tracks. Of a necessity, the race track ovals were lengthened and the number of drivers permitted in one race was limited.

Not satisfied with the right angle incline of the curves, many drivers had advocated an overhead roadway at the turns in view of the fact that two drivers had sailed right over the vertical roadway in negotiating a curve. Overhead curves had been built, and they had worked to advantage. But race track drivers were dissatisfied with 350-400 miles speeds, when the rocketmobiles were capable of attaining much greater ones. Each driver sought to beat the next man, and, with the propulsion practically a new toy, the speed marks rose.

This called for a radical change as many of the heavy streamlined cars actually left the ground on the straightaways, bringing death to the driver and destruction to the car. But there were those who immediately came to the emergency with suitable plans.

The new racing cars were shaped like elongated raindrops, somewhat like bullets, and they no longer had wheels. The race tracks consisted of an elevated network of steel lacing through which the mighty speed demons careened. The great oval track, some twenty-five miles in circumference, consisted of a series of virtual tunnels, a channel for each car. The rocket auto ran on eight steel tracks completely encircling it, the tracks surrounded by hoop framework and steel lacing. Thus were the rocketmobiles held securely to their course. The race track at Cincinnati possessed channels enough to accommodate twenty rocketmobiles.

The average speed attained was 750 miles per hour, or less, due to the diminishing of speed at the curves. The Cincinnati track consisted of a ten-mile straightaway on each side of the oval, each of the two curves being some two and a half miles in length. The steel lacing of the runways at the curves had been strongly reinforced, but even so, a car, often neglecting to lessen its mad speed at the curve, shot through the enclosing framework to a wrecked, twisted destruction.

With the perfection of radio and television, the human driver of the speed demons was done away with, and the cars were operated by radio control. No longer was the race track driver subjected to the thrilling proximity of death which had become accustomed to exact its toll at every race. The driver now sat in the operators' stand and guided his car by radio in the same building with his rivals. The progress and position of each car was registered on a gauge, which those in the stands, and those before their television units all over the country, might see.

Thousands came to see the races. Millions listened and saw over their television radios. It was one of the greatest of annual events dear to the hearts of the people. Stripped it was of its stark horror when human drivers were removed and radio control substituted. With the change had gone a bit of the thrill, but nevertheless, rocketmobile racing had lost none of its popularity. Television was in a large way responsible for this.

"Here they come on the return stretch!"

The Falcon's Finish

THE juggernauts of steel screamed through the framework of the track, rapidly nearing the south curve before passing by the stands on their last lap.

"Here they come!" yelled Lane.

"There they go!" added George Bradley.

"And fairly even!"

"The last lap!"

"The *Moonbeam* is way behind!"

"And the rest are just as far behind the *Moonbeam!*"

The two drivers in the operators' stand now put everything they had into the race with an attitude of tense, rigid fatalism. With speed levers released to the final notch, they raced like lightning down the tracks, red hot brakes applied as the two neared the dangerous curve. But their speed was not diminished sufficiently to insure absolute safety in negotiating the bend. It was a gamble as well as an application of the operators' skill. The heavy, steel guard rails groaned and bent threateningly under the terrible strain of the hurtling rocket cars which flew into the two and a half mile curve.

"Watch the gauge!" shrieked George.

The two rocket cars leaped and roared towards the goal ahead of them, each one vainly striving to leave the other behind. Up in the operator's stand, beads of sweat stood out upon Brady's countenance. His opponent was cool, though a bit determined, and white in the face.

Less than forty seconds was consumed in covering the ten-mile straightaway. The *Silver Bullet* and *Falcon* thundered on toward the finish. Many millions of dollars would be won and lost when the winner blurred across the finish line. The betting had been heavy.

"Here they come!" announced Lane, his eyes, like those of all the spectators, fastened upon the position indicator. "The *Silver Bullet* has a slight lead—the *Falcon* is creeping up!"

"The *Silver Bullet* wins!"

A tremendous volume of sound from a great many lungs rolled across the sea of faces. Hats were either thrown triumphantly into the air or else jammed down disconsolately over worried foreheads, revealing those who had won and those who had lost.

"Well, that's over!" exclaimed George. "Brady—"

His speech was interrupted by a distant, rending crash of metal upon metal.

"The *Falcon!*" cried Lane. "It has crashed through the south curve!"

And it was true. The driver of the *Falcon,* the car which had finished a close second to the *Silver Bullet,* had left the accelerator open to the very finish line in an effort to beat Brady's car. He had jammed on the brakes too late, and, though successfully closing part of the distance between his car and the *Silver Bullet,* had nevertheless come in second. Hitting the curve at nearly full speed, the *Falcon* had crashed through it, being reduced to a mass of junk after having plunged headlong for several hundred yards through the air.

"That's the closest race we've seen in a good many years!" exclaimed George Bradley to his chum as they left the race track.

"It was, and there's no doubt but that Brady won the race fairly," stated Lane. "The *Falcon* won second place just before it crashed! That was a desperate attempt to pass the *Silver Bullet!*"

"Say, it must be fun to own one of those rocketmobile racers!" exclaimed George Bradley enthusiastically.

"And profitable if you win the race," added Lane Cardigan. "Brady cleared up a quarter of a million in prizes, not to mention the money won on bets."

"That's worth anybody's time to try for!"

"But the expense of building, running and licensing the rocket cars is great," reminded Lane. "And to get into the big race, you must have come out a winner in certain other smaller elimination races, as well as having passed other requirements."

"Just the same, a quarter of a million dollars is a lot of money."

The Secret

"GEORGE, if I tell you a dark secret, will you promis is not to tell?"

"I'll keep it dark."

"I didn't intend telling you for a month yet, and then I was going to let you in on it," stated Lane, "but I may as well tell you now."

"What is it?" asked George eagerly.

Lane glanced cautiously around.

"Father and I are going into rocketmobile racing," he said.

"What?"

"Exactly!"

"Positively, is this on the level?"

"Absolutely!"

"You mean—the big races—here?"

Lane nodded his head affirmatively.

"That's great!" exclaimed George joyfully. "Do you think you can compete with Brady?"

"Yes," replied Lane Cardigan. "You see, dad is quite an inventor along those lines, particularly regarding rocket cars, and he's been connected with General Motors for a great many years. He is going to invent a new rocket car operating on greatly improved principles."

"Will he turn out a winner, do you believe?" asked George, seeking his friend's innermost opinion.

"I really think so," answered Lane honestly. "You see, a race is largely won by three factors: the rapidity of decreasing speed on reaching the curves, the speed in traversing the curves, and the pick-up coming out of a curve. If it were not for the curves, a greater average speed would be attained in the races."

"I know it," agreed George. "Ellison Granger holds the rocketomobile straightaway championship with a speed of 934 miles per hour."

"On a forty mile course with no curves," said Lane. "The highest speed attained in today's race was at the finish when the *Falcon* and *Silver Bullet* were traveling about 800 miles per hour."

"That's plenty fast!" observed George.

"Did you ever hear of Burt Durkee?" asked Lane.

"Not Suicide Durkee, the famous driver of the rocketmobiles?" returned George.

"Exactly," affirmed Lane. "He was the last driver to abandon piloting the rocket cars, and he only gave it up with great reluctance when a revision of the racing rules made it imperative for every driver to do so."

"What about him?" queried George.

"Father has hired him in the construction and layout of our rocketmobile. He knows more from actual experience by riding in them than a great deal of the present day builders, and as a crack mechanic he has no

equal. His help will prove quite invaluable to us."

"He came out of two rocketmobile crashes alive!" stated George. A wreck usually meant death in the days when men drove the rocket cars. That was fifteen years ago."

"And when he persisted in operating them himself instead of controlling them by radio, he won the nickname of 'Suicide,' added Lane. "He was the last man to abandon human control of the rocket autos, and then only by rule of the racing board."

"He's going to help you build the auto?"

"Yes. He and my father are greatly interested in the plans and blue prints they have compiled and drawn up. It means that we're going to have a rocketmobile in next year's speed classic, George!"

"And I'm backing it to be a winner!" stated George warmly.

A Prowler

ONE evening, several months later, Lane Cardigan and his father sat together enjoying the luxury of their apartments above the hundredth story of their hotel in Chicago. They sat beside a huge television screen, watching and listening to a *revue* which originated in San Francisco.

Suddenly a chimes rang out distinctly in the next room, and Lane jumped quickly to his feet.

"It's the shops!" cried Dan Cardigan.

Together they rushed into the next room where the chimes rang incessantly.

"Someone has broken into the shops!" exclaimed Lane, pointing to a television screen.

Thrown into clear relief upon the screen was the picture of a man moving cautiously about a half built rocketmobile.

"The switch!" cried the elder Cardigan. "Throw it!"

Lane reached out and laid his hand upon a switch.

"But stay!" counselled his father in direct disagreement to his previous order. "Wait and watch, but be ready!"

Together they watched the silent figure of the man, who was totally unaware of the fact that he was under scrutiny. Silently and cautiously he inspected the parts of the rocketmobile.

"What does he want?" asked Lane.

"He's probably a spy from one of the other concerns who are building and operating rocket autos for the races. They've got wind of our building one somehow."

"We'd better not wait any longer," warned Lane. "He is apt to destroy some part of the auto."

"Not so early in the game, I think," spoke Dan Cardigan wisely. "Such things usually take place just before the big race. If something like that happened now it would give us a premature warning and afford us an opportunity to build a new car."

"Shall I throw the switch?"

"Yes!"

Lane pulled down the handle.

A strange action took place in the scene upon the television screen. The man staggered away from the rocket car and tottered to his knees before falling to the floor.

"That current of electricity is a bit too strong, Lane." observed Cardigan. "It should merely paralyze a man temporarily, not render him senseless."

They watched the screen. Presently two men entered the shop, followed later by another.

"Suicide!" exclaimed Lane as the third man entered.

Upon seeing the two men enter the shop, Lane had turned off the current, and now the two detectives and the mechanic lifted the prostrate man to his feet.

"Let's be getting down there and see what's up!" urged Lane.

"Most assuredly," said the father.

The two entered an elevator which shot them quickly to the fifty story level of the great building. Here, they boarded an interskyscraper car which whirled them off over a narrow runway far above the street and into the towering building across the avenue. The car stopped to disgorge and take on new passengers. They continued on until upon the other side of the city, the car entered one of the huge industrial plants.

They hurried quickly to a level far below the street, and ran into the shop where the rocket auto was being built under the guidance and supervision of Suicide Durkee. Lane and his father found the famous racing driver alone. The detectives and the intruder had gone.

"Well," observed Durkee, "I see there is someone else besides ourselves interested in our work."

"Yes," agreed Dan Cardigan. "So it would seem. Did he disturb anything here?"

"Not a thing," replied Suicide. "I guess you didn't give him a chance."

"No, we didn't," stated Cardigan. "When Lane and I heard the alarm, we watched him in the television screen only a short while."

"Do you think he was a common prowler—or a spy?" inquired Suicide.

"I'm inclined to believe he was a spy by the way he went about inspecting the rocket auto. That's why Lane and I hesitated before sending in the alarm to you fellows and putting him out of business until you arrived. We wanted to watch him."

"He's at police headquarters now," said Durkee.

"Good," stated Cardigan. "We'll go around there tomorrow and see him."

"Nothing else to do here but lock up," opined Lane. "I wonder how he got in?"

"Picked the lock," answered Durkee. "He was proficient at it, too. Anybody is who can pick that lock."

"Well, let's go home," said Dan Cardigan.

CHAPTER II

Brady Shows His Hand

LANE and his father returned to their apartments, this time choosing an air taxi in preference to the slower moving and frequently stopping interskyscraper cars. Long into the night they sat together and discussed the problem in the light of the new developments, and before they retired they had evolved a set of plans to meet this new menace to their success.

On the following morning they visited police headquarters where the intruder was being detained. He was being held on charges of unlawful entry and attempted burglary. The man pleaded guilty to the first charge but denied the second.

Lane and his father discussed the matter alone with the Chief.

"He sticks to the story that he was in your shop looking for a place to sleep," said the Chief.

"That's a pretty lame one," smiled Cardigan. "Evidently, then, he wasn't aware that we watched him over a television screen for several minutes before we threw in the current."

"Probably not."

"I'll tell you what to do, Chief," counselled the inventor. "I'm not preferring any charges against him. Let him go free. Then put a detective on his track. If he is a spy, as I think he is, I want to see who is back of this."

"Sure," replied the Chief. "I understand."

That very evening, following the release of the man found prowling in the machine shop, Lane and his father received a call from the detective who had trailed the man.

"He went to the Crescent Club where he changed his clothes first of all," informed the sleuth. "He's no ordinary tough, as he made out to be, when we caught him. He had assumed the rôle as a disguise. I followed him to Brady's house."

"Brady!" exclaimed Lane. "So that's whom we're up against, is it!" He's trying to see what kind of a car we've got!"

"I wonder what that fellow would have done if we hadn't got him just as we did?"

"Do you think he came to destroy the car?"

"I'd quicker believe he came to steal some of our new ideas or else to estimate our chances of turning out a winner. I hardly believe that Brady would play a trump card so early in the game."

"We'll just have to sit tight and watch. In the meantime we'll not let him know that we're wise to him."

"Do you think that fellow can tell him anything worth while about our car?"

"No. He wasn't there long enough."

* * *

As the roar of the crowd in its wild pandemonium swelled in a great volume of sound, George Bradley slapped his chum upon the shoulder and yelled hoarsely into his ear.

"That lets your car into the national speed classic next month, sure enough!"

"My *Mystery* car will run!" observed Lane proudly. "Here comes father and Suicide Durkee!"

"What a magnificent finish!" exclaimed Dan Cardigan coming up. "We should take the prize at the races next month."

"And beat Brady's *Silver Bullet!*" added George.

"This is the third race we've run within the past two months preliminary to the main classic," stated Durkee. "That makes the three elimination contests we have emerged from victorious. Those specified three are all that we need to fill the final requirements of the entry qualifications."

Before the Race

A SALLOW faced individual now sauntered up and spoke to the inventor.

"Happy returns of the day, Cardigan," he smiled. "I see you're in the big race now."

"Yes," stated Dan Cardigan confidently, "and we're out to take that title you've held for the past three years."

"You have a fast car there, Cardigan," spoke Brady, "but I hardly believe it will beat my *Silver Bullet.*"

"The *Mystery* is the fastest rocketmobile racing car on the tracks today."

"Today," taunted Brady, "but not the day of the speed classic at Cincinnati."

"Wait and see," was Lane's comment.

"I've got a lot of good money which says my *Silver Bullet* will come in ahead of your *Mystery,*" hinted Brady.

"And it will all be covered in good time before the race," assured Cardigan. "We're laying no early bets. It's a full month before the race."

"In that time something might happen to your rocketmobile," was Brady's parting shot.

"He means that!" said Durkee emphatically. "We've got to watch out for foul play right up to the day of the race! Someone must stand guard over the *Mystery* at all times!"

"Someone shall," agreed the inventor.

And so the weeks rolled onward, and as the day approached ever nearer, when the *Mystery* should vie in the classic with the other fastest rocketmobiles in the United States, Lane's excitement grew in intensity. Under the radio control of Suicide Durkee, they had already easily won the three elimination preliminaries and would be one of the twenty rocket autos to compete for the championship.

In the public eye, three rocket cars were held forth above the rest as likely winners. They were the *Silver Bullet, Mystery* and *Radio Wave.* The latter car was owned by a millionaire named Johnson. Of all the three, the *Silver Bullet,* the previous winner and record holder of three years standing, was the one favored the most both in betting and popular opinion. *Radio Wave* and *Mystery* divided honors about evenly in the eyes of the majority of racing experts. Both were new cars which had been built within the past year and had emerged winners of their elimination contests.

There were others, to which a few of the "dopesters" conceded a possible chance of winning, such as *New Moon, Juggernaut* and *Moonbeam,* the latter a winner of third place in last year's classic. The *Juggernaut* was a successor to the *Falcon,* second winner of the 1974 national classic, which had crashed through the curve beyond the finish line. Though having come through its initial races a winner, the *Juggernaut* was not adjudged a favorite by the experts, as it failed in its early races to measure up to the standards of the *Falcon.* In all, there were twenty rocket autos ready to compete in the race, one for every tube in the Cincinnati race course.

Lane's excitement was equally shared by George Bradley as well as by his father and Suicide Durkee. Suicide, as usual, was to be at the controls in the operators' stand.

All over the nation, excitement had mounted high as it always did over the national speed classic. The betting had been carried on to an unparalleled extent in the history of rocketmobile racing. The odds upon the favorites were 5—4—4, the *Silver Bullet* being given a slightly better chance of winning than the *Mystery* and *Radio Wave.*

The Plotters

A WEEK before the race, two men sat in close conference in Brady's quarters. One of them was Brady. He was talking.

"I'm telling you, Le Fave, it must be done if we're to win. That *Mystery* car is going to prove another *Falcon,* or better than the *Falcon,* and you know how near that car came to beating me last year."

"I sure do," agreed Le Fave. "Didn't I have forty grand of my own money on your car? The suspense was terrible."

"To win last year's race, I had to stretch my car's speed to the limit," continued Brady. "Now that's dangerous." "It makes an exciting race," was the other's comment, "I never sweated so much in all my life as last year at the race—with forty grand on that race, and you letting that bird run even with you while you were doing your best."

"That's it!" stated Brady. "That's just the trouble! What we want to do is to have a sure thing like the first two classics the *Silver Bullet* won!"

"You mean a race with some slower cars, and, to make it real interesting to the customers, you run even with the fastest two until the last lap before reaching your full stride," suggested Le Fave.

"You've got the whole idea in a nutshell!" approved Brady. "Now look here, I know this racing problem a great deal better, I believe, than most men in the game, and the *Mystery* is an opponent to be reckoned with. The *Radio Wave* is good, but contrary to public opinion, I know it can't compete with either my car or the *Mystery.*"

"The *Radio Wave* isn't to be feared, you mean?" queried Le Fave.

"Not for first place," stated Brady, "nor second place either for that matter—unless one of the two leading cars is wrecked."

"Wrecked?" repeated Le Fave in query, his eyes glittering strangely at the suggestion.

"If such a thing should occur," suggested Brady, "say at one of the curves."

"There's not a chance of loosening or weakening the curve bars," protested Le Fave. "They are all carefully tested before the race, and then the whole course is guarded up until the time for the race."

"Oh, no!" expostulated Brady in astonishment at the idea. "You've got me wrong! We'll try nothing like that! It's too crude, and besides there are ways which are much safer."

"Safer?" asked Le Fave, his crafty face brightening.

"A great deal safer," assured Brady. "In fact, I've an excellent plan which will elude all detection. We might possibly be suspected afterward, but nothing could ever be proved."

"What is it?"

"The *Mystery* must be taken care of," said Brady. "We've got to be sure of that race."

"What shall we do—give it the same works as we did the *Comet?*"

"No, I wouldn't ever try that again, and besides I don't believe there's a chance of it in this case. The scheme I have in mind is much better, and it is far less risky."

"Good! Let's have it!"

And with heads bent together, Brady explained to his confederate the startling, ingenious plan he had formulated to insure his winning the race. As Le Fave listened, a smug attitude of satisfaction settled over his sharp features, and he harbored the opinion that Brady was no less than a master mind.

"That's great, Lynn!" he approved, following the disclosure of the scheme. "I wouldn't have thought of it in a ——"

"Sh-h-h!" warned Brady. "Someone is coming!"

It proved to be a servant. "A Mr. Smith to see you, sir. Says he is here on important business."

"Send him in," directed Brady, and then to Le Fave. "Stick around. Hide in back of those curtains until he's gone. I'm not through talking with you yet."

Le Fave did as he was bidden, and took a position behind the drapes. When Brady's visitor entered it was was supposed by the latter that he and Brady were together alone.

Smith's Offer

"WELL, Brady, you've never met me before, and probably wondering what I want," was the newcomer's salutation.

"Why—yes!" replied Brady, taken a trifle aback by the other's direct, forceful manner.

"All ready for the race, I suppose?"

"Certainly. Is it the race which your visit refers to?"

"It is."

"What can I do for you?" Lynn Brady was all interest and suspicion, now that he had learned the motive for the other's visit.

"How would you like to clean up big on this race, Brady?"

"I expect to."

"How?" inquired Smith. "The *Mystery* has a better chance to win."

"You think so, do you?"

"I am positive."

"Come clean!" demanded Brady, growing a bit irritable over the parrying remarks. "What's the game?"

"Just this, Brady. How would you like to throw that race for $150,000?"

"What! When the purse is $250,000? Do I look crazy?"

"From the way you talk, anyone would think you had already won the money. I'm telling you, Brady, with that *Mystery* car competing against your *Silver Bullet,* a bird in the hand is worth two in the bush. The chances are mostly against you, but still there is a slight possibility of accident to the *Mystery,* in which case you would probably win. What do you say to throwing the race and playing a sure thing. Think of the big cut you'd make betting against your own car. What do you say?"

Smith withdrew a sheaf of bills from his pocket. Brady's eyes bulged in sudden amazement at sight of the denominations. They were ten thousand dollar bills. Smith slowly and methodically let his fingers ripple over them.

"Here are fifteen ten grands," he said. "Does money talk?"

"Your voice is too weak," smiled Brady, regaining his compospre. "I'm sticking. I'm standing pat to cash in upon the quarter million—as well as my bets, all on the *Silver Bullet.*"

"You're a fool!" cursed Smith heatedly.

"Are you from Cardigan's camp?" asked Brady.

"Never mind!" was the avasive answer. "Do you, or don't you, accept the offer?"

"I don't!" retorted Brady. "I'm out for bigger game!"

"And out to lose, too!" warned Smith, rising and

walking to the door. "You haven't got a chance beside the *Mystery!*"

"Oh, yes?"

"Most certainly!"

Smith's footsteps receded down the hallway. Le Fave stepped from behind the draperies.

"What's up?" he inquired. "Can Cardigan been trying to bribe you?"

"It looks like it!" exclaimed Brady nervously. "Don't worry—we'll take care of him in a big way!"

"I never thought Cardigan would try that," mused Le Fave. "It doesn't seem like him."

"Stranger things than that have happened, and will happen, in the racing world," observed Brady.

"We'd better keep an eye on the *Silver Bullet.*"

"It's safe," replied Brady. "We've got to take care of this *Mystery* more than ever now. That man's visit proved it. Be sure and do what I told you."

"You just leave that to your old buddy," reassured Le Fave.

"Good!" commended Brady. "We'll commence laying our bets pretty soon. The race is only a week off."

The Mystery Car

THE day of the great race dawned. All morning long, the streamlined pellets of steel droned and roared around the famous Cincinnati tracks in trial runs. Every part of each speed machine was looked over carefully, and a close inspection of each racing channel was not neglected. It was a beautiful, warm, sunshiny day in the late September, and the superb weather promised to be conducive in bringing a large turnout of fans to witness the race from the stands. A large number of racing enthusiasts preferred actual attendance at the race, rather than watching and listening at home over the radio. It was a case of proximity offering the greater thrill.

In the afternoon, the famous epic was to come off. By noon, the stands began to fill with eager spectators, anticipating the battle of wits and nerves in supplement to mechanical stamina and a small percentage of luck. The crowds swelled up into the stands and out upon the grounds as the time neared for the race to start. Many an excited conversation took place, and many last minute bets were laid. The cars referred to in the conversational buzz of the anticipating thousands were for the most part *Silver Bullet, Mystery* and *Radio Wave.*

It was only a short time before the races were scheduled to start. Besides the eager thousands gathered in the stands and around the grounds, there were attentive millions who sat before their loud speakers and television screens, which transported the tensity and excitement of the event over thousands of miles to the four corners of the earth.

"How is everything?" inquired Dan Cardigan coming up to one of the starting chambers of the race track. "All set?"

"The *Mystery* is in ship-shape condition," reported Suicide Durkee, pointing to the long, slim, cynical rocketmobile before which he, Lane, and George Bradley stood.

"She looks great!" was George's enthusiastic opinion.

"And is just as fast as she looks!" added Lane.

"Haven't seen any suspicious looking persons around, have you?" asked the inventor. "Any of Brady's men, say?

"Why," explained the mechanic and operator, "Brady came around himself a while ago and stopped for a few minutes' chat. You know, he has the second tube next to ours."

"What did he say?"

"Oh, nothing important. Just asked me how the *Mystery* was running and like that."

"H'm," was Cardigan's only comment.

I guess we have nothing to fear from him, dad," said Lane. "He's going to race fair and square. He thinks his *Silver Bullet* has the edge on our auto."

"Well, the race isn't over yet," observed Dan Cardigan, choosing to remain suspicious. "You remember the *Comet?* It gave out and stalled in the race with the *Silver Bullet.* It will pay us to go cautious."

"Yes, I remember," answered Durkee, "but someone had previously tampered with the mechanism of the *Comet,* and no one has been near the *Mystery* except ourselves."

"True," agreed the inventor.

"Have you laid all your bets, dad?" inquired Lane.

"Yes."

"How much have we on it?"

"A half million besides the prospects of the quarter million prize."

Lane gave a voluble whistle.

"If it was any other car besides the *Mystery,* I'd be scared to know I had that much on the race," he said.

"First call for drivers!" bawled a voice from the loud speaker.

"Come on, that's our cue!" exclaimed Durkee. "There's places for all of us up in the *Mystery's* booth!"

They ascended to the operators' stand, which was divided into twenty partitioned booths, one for each car. Lane, George, Suicide and Dan Cardigan entered their booth.

"Now all we have to do is wait for the preliminary gabbing to be gone through with, and then we're off," grinned Durkee, setting the controls before him, ready for action.

CHAPTER III

The Radio Menace

"GET ready for the opening lap!" came the starter's announcement.

This was to get the rocketmobiles lined up and started off evenly around the course before the signal was given to start. They were to gauge their speeds evenly until they passed the starting line, having finished an entire lap in their preparation. It was required that they should arrive for the start all together; otherwise, it was necessary for them to go around the entire course again before commencing the race. This insured an even start and warmed up the rocketmobiles gradually. The speed was 100 miles per hour around the course in the preliminary lap. This was not considered a part of the race.

"Get ready!" came the order. "Remember to keep even! An entrant getting ahead or behind when the starting line is reached calls for a repetition of the starting lap!"

George, Lane and the latter's father sat tense with excitement. Suicide Durkee, at the radio controls of the *Mystery,* was the only calm member of the four.

"Start away!"

A cataclysmic roar sounded from outside as twenty huge speed demons slowly broke into a gradual velocity and began their initial line-up. With practiced eye, Suicide Durkee watched the indicator within their booth which marked the positions of all twenty of the rocketmobiles on the course, keeping the *Mystery* as even as possible with the majority of the autos which were gradually lessening the distance between their straggling ranks. They drove at what was to them a snail-like pace. The trial lap was often the most tedious of the entire race, consuming a good quarter of an hour. The race itself usually consumed an hour and twenty minutes or more.

The twenty cars gradually resolved themselves from a ragged line into an even formation as the chafing horde of speed demons neared the north curve.

"You're out of line!" exclaimed Lane to Suicide.

"So I am," agreed Durkee. "That's queer. I didn't let up on the speed button."

Durkee worked the *Mystery* back into place once more and the bevy of racers sped on toward the starting line.

"It appears to be an even start on the first go!" exclaimed George.

"Suicide, the *Mystery* is out of line again!" protested Dan Cardigan.

"It's too far ahead now," observed Lane.

Durkee worked at the controls with a puzzled expression. All four of them watched the erratic progress of the *Mystery* on the indicator. Alternately it jerked ahead of the group of rocket cars and then behind. The other nineteen contenders flanked one another evenly.

"Something is wrong!" cried Durkee, a worried look mantling his features. "The car isn't answering the controls all of the time!"

An ashen pallor spread over the face of Dan Cardigan. Great concern was expressed in the drawn lines of his countenance.

"What—what is it? What is the matter?"

"It isn't the car—it's the controls!" said Durkee.

"Let me see them!" requested Lane.

The operator quickly changed places with Lane, who, on previous instruction from Durkee, had become fairly proficient in the operation of the rocketmobile by radio. He ran practiced fingers over the buttons, levers and dials. In the meantime, the *Mystery* erratically gained on its companions and then slumped in the rear once more.

An admonition came in over the loudspeaker. "Operator of the *Mystery,* get your car back into position or the preliminary lap must be repeated!"

"Dad!" cried Lane. "These controls are useless! The *Mystery* doesn't respond to them!"

"Are the controls out of order?" queried the inventor in surprise. "I thought they were thoroughly examined and tested this morning!"

"They were," affirmed Durkee, his puzzled features having relaxed into a grim light of understanding.

"We must call for time out to repair our controls!" exclaimed Cardigan. "This is serious!"

"No need of repairing them, Dan," spoke the celebrated race driver quietly. "The controls are all right—they're just as we left them this morning."

"Then what—"

"Radio interference!" suggested George Bradley suddenly.

"Exactly," agreed Suicide Durkee.

"You mean—"

"That Brady's cunning has got the jump on us in a manner which is totally unexpected!" finished Durkee.

"We'll protest to the officials at once!" exclaimed Lane heatedly.

"No use," countered the race driver. "We'd have to prove it before they'd give our story any credence. All Brady would have to do would be to cut out his interference and everything would look as though it were on the level."

"Until the race was resumed," supplemented George.

"Yes," said Durkee. "There's no way we can kick up a racket about it at this eleventh hour, but that it might do us harm."

"But I've got three-quarters of a million at stake, man!" was the excited rejoinder of Cardigan. "Not to mention the millions which faithful race enthusiasts are betting on us to win. If I back out, I am not only financially ruined but disgraced as well! It would appear as if I had sold out!"

Suicide said nothing. He was doing a bit of deep thinking, his brow furrowed in concentration. A gleam suddenly shone in his eyes, and the worried, harrassed look relaxed into one of hope and determination.

Suicide Durkee Rides

A MESSAGE from the starter's box interrupted the heated discourse going on in the *Mystery's* booth.

"Preliminary lap must be run over again! *Mystery* too far ahead! Second failure of any one car to make an even start disqualifies it for the race!"

"Do you hear that?" asked Cardigan, the sweat standing out upon his forehead. "It means we're sunk!"

"No it doesn't," snapped Durkee desperately. "Get in touch with the officials' box!

"What can we do?" asked the inventor.

Lane rapidly made connections with the officials' box.

"I'm going to run the *Mystery* myself!" was Durkee's startling announcement, "By actual control!"

"You're going to ride in the *Mystery?*" gasped George in mingled awe and admiration.

"Yes!" was Durkee's triumphant reply. "I'll beat Brady now or else die in the attempt!"

"But the officials won't let you!" deplored Cardigan. "It is against rules!"

"Maybe they won't want to, but when the people out there, who have money bet on the *Mystery,* hear of the situation there will be such a storm of protests that they'll be compelled to let me ride! We won't mention Brady—just say it is broken controls!"

"I've got them on the line!" stated Lane at the photo telephone.

"Here, let me take it!" exclaimed Durkee, reaching for the phone.

It was promptly handed to him, and he was soon arguing with the officials. For a time they protested, as Durkee had said that they would, claiming that it was against rules and that Durkee was taking his life in his hands, but finally they agreed to let him ride.

In the meanwhile, the crowd was waxing impatient and voluble over the delay. The rocketmobiles had all slowed to a standstill, and were awaiting the word for a reattempt at finishing the preliminary lap in order. All sorts of rumors floated around. It was clear that the *Mystery* was the cause of all the delay. It circulated around that the rocketmobile entered in the race by Cardigan had suffered a minor accident just before the

race in a trial run and would be scratched from the list of entrants. Others claimed that Cardigan was trying some stall or other by purposely holding up the race.

The reason for the delay was disclosed by the officials just as angry remarks began to be passed about. They announced that the radio controls of the *Mystery* had become seriously impaired, and Suicide Durkee was to be allowed, by special permission, to pilot the *Mystery* rocketmobile himself.

A tremendous roar of approval greeted this news, and the thrilling information rang in the ears of people all over the world. Here was to be a great race, an exciting epic of all time. A human was going to drive one of the terrible steel creations which threatened death to the driver at every curve. The possibility of a rocket car tearing through the retaining guard rails at the curves was very imminent. The famous old speed king, Suicide Durkee, was about to attempt a feat which had not been accomplished upon a race course in fifteen years —the last time by Suicide himself.

The crowd went mad with delight, acclaiming the race driver and the auto he was to drive. The cries and cheers rang in great volume upon the air as Suicide, with a delighted grin, climbed into the machine.

"Suicide!"

"Mystery!"

"Suicide Durkee!"

But what the millions of spectators did not know—were totally unaware of—was the fact that a sinister plot lay like some gigantic, poisonous spider behind the incident, ready to spring at any moment, bringing disaster, death and destruction. Had they known, their already tense excitement would have heightened considerably, and there would have been added a bit of frozen horror to the situation. For Suicide Durkee was not alone within the rocket auto. Unseen at his side rode the grim reaper, sightless eye sockets peering intently ahead, bared jaws a-grin, and with the scythe of death gripped firmly in a bony hand.

Death Rides With Suicide

"TAKE good care of yourself!" warned Lane to the driver as they lowered the plate of steel back into place upon the *Mystery,* preparatory to bolting it down, thus sealing the intrepid driver within the auto's confines.

"Don't worry," grinned Durkee with an open expression of confidence, behind which lurked a faint suggestion of fatalistic resignation, "We'll win this race now."

"We'll be in touch with you all of the time!" promised Cardigan warmly. "The car is equipped with radio-television!"

The lid was bolted down. Now, the order was given once more to begin the preliminary lap at the prescribed speed of 100 miles an hour. The rocketmobiles moved off upon the twenty-five mile course, assuming an even line.

This time the *Mystery* did not waver from the group of autos. It was controlled by the cool, experienced hand of Suicide Durkee, the only man to live through two rocketmobile wrecks in the earlier days, when men piloted the speed kings. In fact, he was the only man who had ever been in two wrecks. Suicide had earned his nickname by his careless defiance to threatened death after two very narrow escapes, and it was with the same desperate recklessness that he now operated the controls of the *Mystery,* to which in a large part he had contributed the plans for building.

Within the booth of the *Silver Bullet* at the operators' stand, Lynn Brady held a hushed conversation with another over a private photo-telephone. In the square below the phone's mouthpiece was depicted the worried face of Le Fave. The latter was addressing his superior.

"What'll we do now?" he asked.

"You fool!" hissed Brady. "You should have waited!"

"I know," wheedled Le Fave, "but I didn't realize that our secret controls were so bumpily attuned to the *Mystery.* I had to get the feel of the thing, didn't I? I thought I could work in conjunction with Durkee, getting used to the feel of their car so that I could work to better advantage later on."

"Of all the fool things!" lamented Brady scathingly. "With an hour and twenty minutes or better of racing, you'd have plenty of time to get the feel of the thing, to throw Durkee's radio control off, and to take over the management of the *Mystery* yourself! You've made a botch of it!"

"What shall we do then?" queried Le Fave.

"You can still save the situation," replied Brady. "Those controls are still susceptible to radio direction, and it's going to be a hard job for Durkee to keep his attention on them all at one time. You've got a television indicator in the secret cellar which shows the position of all the cars. Watch it. Take over any of the controls you can when Durkee hasn't got his hands on them, you can't see him, but you can test out all of the controls of the *Mystery.* If you can't slow Durkee up, speed his auto at the curves."

"And make him jump the tracks and crash?"

"Yes!" snapped Brady.

"But—but—Lynn—that's murder!"

"It can't be helped now! Man, we've got our entire resources on this race! We must win!"

"But if we're caught?" wailed Le Fave.

"We won't be!" exclaimed Brady resolutely. "It will appear as an accident!"

"All—all right!" agreed Le Fave a bit hesitantly.

The man had not previously considered such drastic measures. The realization of such sudden necessity had, for a moment, frightened him and threatened to overwhelm him in terror.

"Don't forget to keep the *Mystery's* control radio out of order too!" reminded Brady. "If you don't, you'll have Cardigan butting in on you!"

"O. K." replied Le Fave, now fully reconciled to the grim business at hand. "Oh, by the way Lynn," continued Brady's scoundrelly confederate, as if in after thought, "That guy named Smith approached me just before I came down here."

"What did he want?"

"He wanted to see you."

"Do you know what for?"

"Yes. He wanted to offer you $200,000 to throw the race."

"He did, eh? Raising the ante fifty grand, was he? What did you tell him?"

"I told him you wouldn't consider it for less than a million."

"What then?"

"He said you and the *Silver Bullet* could go straight to hell. He said you wouldn't win the race, and that he was backing the *Mystery* to win."

"Can it be that Cardigan could go that far in bribing me?"

"Don't know," was Le Fave's reply.

"Well, get busy," said Brady. "The cars will be reaching the starting line pretty soon. If anything goes wrong, give me a call."

"The Race Is On!"

BRADY now turned his attention to the *Silver Bullet,* which had fallen out of line a bit. Quickly he adjusted it back into position. The speed demons were not far from the starting line, the entire fleet in perfect formation for the beginning of the famous racing classic.

The twenty huge rocketmobiles rolled on together around the south curve toward the starting line before the main stands. They were grouped for a perfect start. The voice of the announcer came in quick, clear tones.

"The race is on!"

Like meteors, or shots from out of a gun, the rocketmobiles sped forward—all except one. That one rocket auto was the *Mystery.* The rest sped forward and left it behind them, the last car in the race. But it was piloted by a human being, and though Suicide Durkee was capable of accelerating and decellerating fast enough at the curves, he could not compete with the others at the start by such a terrible propulsion release as to jerk the car from 100 to 600 miles an hour. A five hundred mile increase at the snap of his fingers would have killed him instantly, snapping his backbone through his vitals. The famed old driver trusted in his ability and the *Mystery's* qualities to more than make up for the distance lost at the start.

The din of the howling thousands was terrific. *Radio Wave* was leading, and the *Silver Bullet* hugged a close second. These two cars had rushed off to a flying start.

"How are you, Suicide?" The voice came in over the *Mystery's* radio speaker.

Durkee grinned at the face before him in the television screen. It was Lane Cardigon.

"O. K." he replied. "I got off to a rather slow start."

"Well, dad and I expected that. You can make up for it later," said Lane. "I'm putting this indicator before the screen so that you can keep track of your position in the race and tell where the others are."

Durkee glanced at the broadcasting indicator, and saw in alarm and dismay that he was way in the rear. The start had placed him under handicap. He saw that *Radio Wave* led, the *Silver Bullet* following closely. Rapidly he stepped up the speed in an even ascent—300, 400, 500, 600, 700 and ever upward—until he was compelled to slow up a bit as the *Mystery* tore into the north curve. Immediately after, however, he increased his speed so rapidly as to flatten himself against the back of the control chamber. Approaching the next curve, after having roared down the straightaway, he cut his speed quickly and flashed around it, immediately letting it out again.

Last in Line

HERE, the *Mystery* held a distinct advantage over its racing competitors. Between the speeds of 400 to 750 miles per hour, the *Mystery* had the fastest and most even reduction of speed and pick-up of any rocketmobile in the entire country. It was this principle on which Dan Cardigan had based his expectations of winning. As he had remarked a year previous, the race would be won at the curves.

The *Mystery* had put this accomplishment to little test in the three preliminary races it had won. There had been no necessity to employ this advantage in winning the races, and as Cardigan had wanted to keep it a secret until the big speed classic, Durkee, at the radio control boards, had not used it.

The *Mystery* was capable of maintaining its wild speed down the two ten-mile stretches of the twenty-five mile oval several seconds longer than the other autos, whose speed diminished the more sluggishly, and after passing the curve, its pick-up was much faster. Here lay the secret of the *Mystery's* advantage, known to but a trusted few.

"How do you like getting back into one of those?" inquired George Bradley over the radio.

"Great!" enthused Durkee spiritedly. "Just like old times."

"Be careful, Suicide!" warned Dan Cardigan. "I want you to win this race, but don't forget that you hold your life in your own hands. Don't hold your speed too near the curves, for if something went wrong—"

The Mystery Is Lost

A ROAR from the crowd interrupted the inventor and drew his attention away from the microphone. The *Silver Bullet* had passed the *Radio Wave.* The *Juggernaut* was also creeping up behind *Radio Wave,* and this represented an unexpected development in the race. The *Mystery* was still the last in line of the twenty racing cars.

Silver Bullet now led.

Gradually Suicide Durkee closed the distance between the *Mystery* and the nineteenth rocketmobile in line. He glanced at the indicator relayed to him by television. He was now even with the car. Putting on an extra burst of speed, the *Mystery* passed it. Suicide smiled grimly as he rapidly overtook the next auto. He was no longer the last one in the line-up.

"He's moving nearer the front!" exclaimed Lane excitedly. "The *Mystery* has passed three of them already, and there it goes past the fourth and fifth—see, they're right together there!"

"Six of them left behind, now!" observed the delighted inventor.

"Seven!" announced George. "How that baby can travel!"

And now Suicide grimly settled down to the grind, and the *Mystery,* gaining on the slower cars in the long stretches and on the faster ones around the curves, roared onward towards the head of the line. The race was fifteen minutes old and already Durkee had guided his charge from twentieth to ninth place.

Veritable cannon shots of steel mechanism, the rocket autos thundered on at terrible speeds, visible only as shadowy flickers when they passed the stands. Faint, colorless blurs they were, gone in a whirring, roaring and screaming. Twenty speed demons catapulted onward, their drivers, all except one, safely situated in the operators' stand, guiding the rocketmobiles. Alone, and gambling with death at every curve in the *Mystery's* mad, reckless speed, Suicide Durkee drove the rocketmobile forward, passing car after car.

CHAPTER IV

Second Place

THE celebrated race driver was actually enjoying himself as he had not enjoyed himself for the past fifteen years. His blood tingled as he sensed the wild speed of his metal steed, and his heart beat faster as he felt the *Mystery* tear into the curves, forcing his body flat against the side of the machine. Centrifugal force threatened any moment to find a weak spot in the steel lacing at the curves—and then Suicide knew that the race was over for the *Mystery*—and for him too. He gritted his teeth. Glancing at the indicator, he saw that he had passed the main line of rocketmobiles which were grouped closely a good distance in the rear of the leaders.

Four cars remained ahead of him. They were *Cosmos, Juggernaut, Radio Wave* and *Silver Bullet.* The latter held the lead. A short distance behind *Radio Wave* and the *Juggernaut* (which previous to the race had not been considered seriously as a possible leader) strove evenly for second place.

From the indicator, Suicide could see that the *Juggernaut* and *Radio Wave* were just ahead of him down the course. Very good, he'd show them his dust on the straightaway beyond the next curve. With a satisfied smile, Suicide noted the decrease of speed in the two cars prior to the *Mystery's* as they approached the curve. And then he quickly cut the speed of the *Mystery,* rapidly bringing it down to the maximum rate considered safe in negotiating the curve. Already he had closed part of the distance. At the end of the turn, he applied the power once more, and with watchful eyes noted the comparative slowness of the *Juggernaut* and *Radio Wave* in their pick up.

Upon the straightaway he opened his speed to the widest, and shot by them in a wild burst of speed which would have spelled certain disaster on one of the two curves. Ahead of him sped the *Silver Bullet.* The crowd had long since gone mad with a delirium of joy at Suicide Durkee's sensational driving. Suicide was the hero of the hour, and, in their enthusiasm, many race fans who had bet on other cars, found themselves applauding him wildly.

It was such a race as had never been seen before, and the spectators all over the country were becoming wildly excited. A man actually piloting one of the rocketmobiles had emerged from last place to pass eighteen other autos and steal second place.

"He's climbing up on the *Silver Bullet!*" yelled Lane triumphantly in the booth at the operators' stand.

"You're getting there, Suicide!" yelled Dan Cardigan over the microphone to the man enclosed in the roaring demon of steel. "Creeping right up on his tail, you are!"

Brady's car was but a half a lap ahead now, and the *Mystery* was rapidly overtaking it. Suicide roared down the straightaway at nearly 800 miles per hour, slowing up to hazardous speed in taking the curve.

Brady, from his security in the operators' stand, jumped up the speed of his *Silver Bullet,* taking chances at the curves which would have been truly horrible for Suicide Durkee to have risked his life upon. Brady was cool and collected. He knew what was coming. Le Fave, in his secret cellar before the radio controls, was a bit impatient and nervous to get started.

Lane Cardigan, his father and George were in a happy state of keen excitement and anticipation. Inspired to reckless confidence, Suicide Durkee was in his glory. The crowd was intoxicated with tense delight at the unexpected thrills and bizarre situations offered them. At Suicide Durkee's elbow, his unseen riding companion lifted back his gloomy shroud from a bony forehead, peered intently at the rising speed gauge, and then settled back patiently—to wait.

It was a stirring drama.

Slowly but surely the *Mystery* stole up behind the *Silver Bullet.* The speed of the latter car rose to parallel that of the *Mystery.* Brady allowed scarcely enough time before the dangerous curves were reached to lessen the terrific pace. The speed gauge upon Suicide's rocketmobile also marked an increase as he tore after the *Silver Bullet.*

A Strange Occurrence

VERITABLE plummets they were, shooting through their steel tracked tubes like projectiles from mammoth guns. The *Mystery's* supremacy at the curves was beginning to evidence itself to a marked degree, even though the *Silver Bullet* was taking dangerous risks of hurtling through the steel runways in a gamble between victory and the junk pile.

Within the *Mystery* there rode a human being who had for company a grisly companion, invisible though he was.

Brady had reached the *Silver Bullet's* maximum speed, and could gain no added velocity except at the curves, which he was now taking at an extremely hazardous rate. Bit by bit, the *Mystery,* which had not quite reached its top speed, crept up and even with the *Silver Bullet.*

And then it forged ahead—having emerged from last place in competition with nineteen others to first place! It was stupendous! Here was a champion which displayed championship form, asked no favors or accidents, and overrode all obstacles. The crowd was wild with delight. The race was a little more than two-thirds over, and already victory for the *Mystery* seemed certain.

The rocketmobile under the superb guidance of Suicide Durkee thundered on. Behind him came the *Silver Bullet.* The *Radio Wave* and *Juggernaut* still struggled together, now for third place. Within the *Mystery* there came a radio message from the operators' stand.

"Suicide!" shouted Dan Cardigan. "The *Silver Bullet* is creeping up on you! It's right behind!"

The race driver glanced quickly at the indicator. It was so. Suicide was surprised. He had believed the *Silver Bullet* to have reached its maximum speed. He was further mystified to note that Brady's auto was rapidly gaining momentum. Where had the *Silver Bullet* gained such a sudden spurt of added speed?

"He's ahead of you!" yelled Lane. "Put on more speed!"

Speed! Suicide's eyes wandered from the indicator to the *Mystery's* speed gauge, and he received a distinct shock. It registered less than 600 miles per hour and was falling all the time! The *Silver Bullet* had been putting on no extra speed; instead; the *Mystery* had been slowing up!

His hand flew to the accelerator, and the *Mystery's* speedometer crawled back to where it had previously

been. The lever had slipped back accidentally, somehow, was Suicide's presumption. He now slowed down to take the south curve before catapulting past the stands, regaining his checked speed and roaring down the straightaway. He experienced a qualm of dismay. The incident of his decrease in speed had not only placed him behind the *Silver Bullet* but had ranged him alongside the *Radio Wave* and *Juggernaut*. Now, all three rocketmobiles roared on behind the *Silver Bullet*.

The famous old racing driver jacked up the speed of his auto so that the needle hovered well beyond the 800 mark, giving the crowd a new thrill. Such a speed was unprecedented in the races at the Cincinnati track. Speeds greater than 800 miles per hour were gained only on the forty mile straightaways. For the ordinary rocketmobile, such greater velocities did not allow time for a curbing of speed at the turns.

Quickly he tore away from the two competing cars and like a flash was upon the heels of the *Silver Bullet* which had gained a considerable advantage. Like a comet the *Mystery* screamed around the tracks, the vibration of the fast, reckless pace becoming noticeable within the car.

At the operators' stand, in the *Mystery's* booth, Lane, his father and George watched with satisfaction the increased speed of the *Mystery*.

"Suicide is getting back there!" cried George.

"What ever made him slow up so?" wondered Dan Cardigan. "I thought it was the curve he was taking, but he kept right on slowing up!"

"He didn't seem to know it," observed Lane, "until we told him."

The Death Cheater

SUICIDE DURKEE slowed up as he neared a curve. From time to time he glanced at his speed gauge to see that it had not lost. Now, again, he saw that it had dropped a bit all by itself. He watched the speed lever, and noticed that it moved slowly, barely perceptible in its movement. He threw it back into place. Something was wrong—the lever had never done that before. And now he approached the next curve. As he reached for the brake and speed lever, he saw that the latter was rapidly climbing. He was doing 820 miles an hour at the very commencement of a curve! A terrible fate lay in store for him unless he could decrease with rapidity the *Mystery's* mad momentum!

With a wailing screech the brakes were applied, and Suicide jerked down the speed lever so fast that the sudden abatement of the deathly pace hurled him with force against the control board, holding him dazed against the interior of the *Mystery* which shrieked around the curve, striving to escape the metal guide rails and plunge to destruction.

Suicide's senses reeled for a moment and everything went black before his eyes. The car had miraculously escaped being hurled through the encircling tracks and steel lacing, and was hurtling down the straightaway. It was less than forty seconds to the next curve. Suicide lay back in a humped, unnatural position, nearly rendered senseless. The brake had by now been mysteriously released, and the speed lever, apparently of its own volition, was rapidly creeping back to the wild pace which Suicide's last second effort had diminished, saving himself and the rocketmobile only by a hair's breadth.

In the television screen of the control board, the indicator was obscured by a human head. It was Lane Cardigan, his face mirrored alarm as he gazed at Suicide critically.

"Something's wrong with him!" the dazed driver heard Lane remark excitedly to his companions in the operator's booth. "He's all bent over!"

Then, through his numbed understanding, Suicide heard the voices of the others.

"His speed is rising!"

"He's coming to the curve!"

"He'll crash through it!"

"Suicide!"

"Suicide Durkee!"

"Come out of it, man!"

"Hurry!"

The daredevil race driver's senses began to collect, and he understood more fully the portent of the excited words uttered through the *Mystery's* speaker.

"Hurry, Suicide!"

"Let down on that terrible speed! You're right at the curve!"

Unseeingly, Suicide groped frantically about him for the speed lever and the brake. Veiled mists swam before his eyes. Beside him, the horrid rider broke forth in silent laughter, grimly holding a long bony hand ready to seize the helpless man. But this day, Fate and Death were at variance, and Fortune smiled as the roving hands of the driver clutched upon the objects they sought so desperately. Again the action was but in the nick of time, and once more the *Mystery* raced madly around the curve.

Durkee was now fully alert to his peril, and a chill emanating from beneath the grimy shroud of his terrible passenger entered his body to clutch at the rapidly beating heart. Around the curve the *Mystery* raced, and as the driver's vision cleared, and he regained his full senses, the speed lever mysteriously lowered the velocity of the *Mystery*. The silent, invisible companion of Suicide Durkee slowly withdrew the clutching, bony hand from above the latter's head. Suicide now took stock of his situation.

His two involuntary bursts of speed had not counterbalanced the loss of speed he was now suffering. Here he was on the straightaway, and his speed, instead of picking up, was dropping steadily. The speedometer registered 400 miles per hour. Under his dexterous manipulation, the speed climbed upward once more.

"Something is wrong with the controls!" shouted Durkee into the microphone. "They act by themselves! Are any of you monkeying with the radio board?"

"The controls here are deader than door nails!" announced Cardigan. "We tried them a while back when you were running along fine!"

"It's Brady, then!" exclaimed George Bradley with sudden inspiration. "He's trying to take the control away from you, Suicide! He wants to either slow you up or else smash you through one of the curves!"

"He came near to doing it!" replied the driver.

"Don't let go of any of your controls!" warned the inventor. "If you value your life, watch every one of them!"

"It can't be Brady himself," observed Lane. "He's got his hands full with operating the *Silver Bullet*. It must be one of his men."

"He's way ahead of me!" deplored Durkee. "I'm clear back in sixth place!"

"That's all right!" assured Cardigan confidently. "We'll have this race sewed up yet!"

"How much time have I got?" queried Suicide.

"Twenty minutes!" was Lane's reply.

"Or ten laps!" added George.

"I'll get him!" exclaimed Suicide, gritting his teeth.

The Winner

AROUND and around the twenty-five mile track Suicide Durkee guided the *Mystery,* gaining on the curves and on the straightaways. Rapidly he passed the two ahead of him, coming into fourth place. Time after time he felt a persistent urge of the controls to work without his moving them, but always his hand was ready to restrain their insidious movement. The hideous companion at his side still waited patiently. Once more the *Mystery* rode beside the *Radio Wave.*

The *Juggernaut* had now broken the tie and was a good distance ahead of the *Radio Wave.* Together, the *Mytery* and *Radio Wave* thundered on, both eager to overtake the car ahead of them. The *Silver Bullet,* as was evident on the indicator, still held a substantial lead over the *Juggernaut.*

As the *Mystery* raced into the curve at a rate of speed which troubled Suicide's conscience and peace of mind, a rending crash greeted his ears followed by a whistling scream and a terrific shock. The *Mystery* was thrown from side to side violently. Suicide's blood froze in his veins and his heart stood motionless in sudden horror. Had he broken through? Was he at that moment hurtling through the air into the jaws of death? In the few seconds that ensued, an age seemed to transpire.

He glanced at the indicator, and a cold sweat and feeling of relief broke over him. The *Radio Wave,* riding close to him in its metal laced channel had broken through its tracks to destruction. Its dejected driver in the operators' stand had taken one chance too many at the curves in his desperate effort to come up with the leaders.

Now, only five laps remained. In less than ten minutes the race would be won—by someone.

Within the operators' stand, in the *Mystery's* booth, Lane, his father and George Bradley were filled with an intense excitement unparalleled in the course of their lives. Brady cursed and raved in his booth as he nervously watched the *Mystery* steal up behind him, leaving the *Juggernaut* far in the rear. Durkee, seated inside the *Mystery,* was in full possession of his faculties and confidence once more. Tight lipped, he held the speed high on the straightaways, using to full advantage on the curves the *Mystery's* propensity for a rapid lowering and increase of speed. In every way, he was surpassing the performance of the *Silver Bullet* which was now only a short distance in the lead.

Le Fave, working desperately at his radio controls in a vain attempt to either slow up the *Mystery* or else plunge it through one of the curves in a mad burst of speed, fumed in rage, all of his efforts proving futile. He anticipated the wrath of Brady. The crowd, having already witnessed too many thrills for one race, had yelled itself hoarse. Now the spectators gazed in dumbfounded amazement first at the blurred lines of the rocketmobiles—then at the television screens depicting other sections of the race course—then at the indicators. Somewhere out near the north curve lay the smoldering, twisted ruins of what had been the *Radio Wave,* an object lesson to careless operators.

Beside Suicide Durkee, the grim passenger with the sickle waited patiently—hoping.

There was also another one sitting and waiting patiently his finger resting lightly on a button, ready to depress it at a moment's notice. It was the man who had called himself Smith, and had approached Brady in an attempt to bribe him into throwing the race. Sitting alone at a desk in a distant office building of Cincinnati, the man watched the progress of the race over a television screen. His eyes were upon the indicator while his finger rested deliberately, though lightly, upon the little black button.

His gaze was fastened upon the two leaders, the *Silver Bullet* and the *Mystery,* which were represented on the indicator by two little red lines. With grim satisfaction he watched the *Mystery* overhaul its adversary and thunder past. Only two laps remained. Brady made a desperate attempt to regain the lost lead by excess speed at the curves, his efforts straining the metal protecting rails to their utmost, but it was a vain risk. Roaring onward triumphantly, the *Mystery,* well in the lead, screamed down the last lap—down the home stretch —and across the finish line—a winner!

A Lucky Loser

SMITH, rising, relaxing and stretching himself, took his finger from the button. He rubbed his hands together in evident satisfaction.

At the tracks, later on, the cars were being removed from the course. The *Silver Bullet* had finished second, the *Juggernaut* coming in third. Suicide Durkee was the hero of the hour, modestly accepting the acclaims with a broad, good natured grin. He betrayed none of the excitement and tension he had experienced when he had ridden side by side with Death.

"That was a great ride!" enthused George Bradley for about the twentieth time.

"No other man could have done what you did, Suicide, and I'm deeply indebted to you!" exclaimed Dan Cardigan, expressing deep gratitude. "You risked your life!"

"Well," replied Suicide, the old, reckless twinkle once more asserting itself in his honest eyes, "our car had to win that race, didn't it? We won out in the end!"

"You mean *you* won, Suicide!" corrected the inventor.

"I don't know what I'd done though, without you guys at that microphone in the control room to keep me company, and wise me up to everything."

"Here comes the air taxi!" exclaimed Lane.

As Brady, soured over the result of the race and the defeat of his carefully laid plans and perfidious attempts to put his best opponent out of the race, emerged from his booth at the operators' stand, he bumped into a man just entering.

"Oh, hello, Brady!" announced the newcomer.

"Oh, it's you, is it, Smith!" exclaimed Brady vehemently.

"I hear that the *Mystery* won," observed Smith, carelessly blowing a cloud of cigar smoke toward the angry race car owner. "That's good."

"Good—hell!"

"I say it was *good!*" repeated Smith emphatically. "Good for you!"

(*Continued on page* 569)

An Engrossing New Interplanetary Serial — Part II

The Swordsman of Sarvon

By Charles Cloukey

Author of "Anachronism," "Paradox," etc.

IT isn't so long ago that certain experiments were made in the transmission of information by radio-controlled headgear. Although nothing more has been said about them, and no further successes been heard about additional experiments in this field, it seems safe to say that much more work will be done—perhaps in the not distant future—which will easily make such marvels as are so vividly described by our author in this second instalment of his story not at all impossible.

Illustrated by MOREY

What Went Before:

EUGENE CHILTON, president and majority stockholder of United Utilities, is about to buy an atomic power process invented by Harrison Ives. Chilton and Ives are killed, their skulls crushed in, supposedly by Laura Ives, the scientist's sister, who has stolen the book containing the process and sent it to the three Dornn brothers of Vienna. Later Secretary of State Jones is killed in the same manner. Robert Huston, Vice-President of United Utilities, has engaged Burton Boyd, detective, to investigate Chilton's death. Huston thinks the Dornns are responsible, that they had Chilton killed in order to inherit the controlling interest in the corporation, which Chilton had willed to them instead of to his only nephew, Lee Chilton. Huston wants Lee to inherit the corporation instead of the Dornns, whom he knows to be the source of insidious propaganda that is leading the world into a war of scientific horror. It is discovered that Laura Ives had killed the three men and escaped in each case by walking *through* solid walls, using a machine her brother had invented. The detectives lose track of her. Meanwhile United Utilities is constructing a rocket to go to Venus, and the liquid hydrogen plant has been bombed, doing great damage.

The Dornn brothers are in control of European politics, and plan to join with Fu-Zhse, dictator of United Mongolia, in conquering the western hemisphere. The Dornns receive Ives' notebook, find it to be in code, and engage an expert to solve it. He is not able to do so, but substitutes a fake for the notebook and retains the real one for Burton Boyd. The latter and Huston are flying to the Hudson Bay district to investigate the disaster to the Venus-rocket being constructed by the corporation.

Meanwhile Lee Chilton is transferred to Venus by the scientists of Cor, who plan to overrun the earth. Corians occupy his body and those of the Dornns, whose plan in making war is to decimate the world so that Corians can conquer it easily. Lee and the real Dornns, in Venerian bodies, have been saved from death at the hands of the Corians by Meriden, a giant sword-fighter of the city-nation of Sarvon, which is friendly to the earth and unfriendly to Cor. Lee meets Xavian, ruler of Sarvon, and is impressed by the high idealism of both Xavian the scientist and Meriden the swordsman, who represent the two classes of Sarvonians. He meets also the beautiful Izanne, loved by Meriden, but a girl of the aristocratic, or scientific, class, and therefore difficult for a swordsman to win. The civilization of Venus is a peculiar mixture of science and primitiveness. Jungles cover the planet, and both Sarvon and Cor are immense single structures, city-nations, of steel, many miles apart.

Sarvon is preparing for war with Cor in order to prevent Cor from carrying out its plan of conquering the earth. Meriden has learned that the Corians are planning some new scientific weapon to wipe out Sarvon, and he and Lee Chilton go to Cor as spies in an attempt to find out what it is. They are discovered and cornered in a corridor among the Corian laboratories by a vastly superior force of Corian swordsmen.

CHAPTER XII

Destruction

ABOUT an hour later the UU-7 arrived at Fort Severn and the two men in the cabin saw the icy waters of Hudson Bay to the north and east. The pilot circled down to the United Utilities airport. Below them was a long semicircular row of comparatively low thick-walled buildings. There was nothing but the foundation left of the one that had been on the extreme north. The four nearest it had been demolished, and those farther away were damaged more or less, but not seriously. At the south of the great airport was an immense hangar, more than large enough to accommodate the greatest dirigible in the world of the year 2180. Huston got in touch with di Bargi by using the plane's radiophone, and when the UU-7 touched earth, the professor was waiting for them. They stepped out of the cabin, and Huston introduced Boyd. Di Bargi was anxious to tell his story.

"We do not know where the bomb came from. Of more than five hundred men in that building, two escaped by a miraculous chance. They said, when the doctors managed to restore them to consciousness, that the bomb came horizontally through a supposedly unbreakable shatter-proof window. There must have been terrific force behind it. I do not know exactly how much liquid hydrogen we had, . . . it was almost five tons a week ago, and this week's report would have been in today if this accident . . . no, it's not an accident

The surrounding circle became tighter, the fighting more severe, more purposeful. The roomful of warriors, scores of them, had been put to shame by two lone swordsmen. . . .

. . . hadn't occurred. You know it's difficult stuff to keep indefinitely in the liquid form. Its critical temperature is —234° centigrade, and the critical pressure is a trifle better than twenty atmospheres. We have not been permitting any evaporation, but have been storing it in hundred pound units, in drums, using the admirable process perfected in 2169 by Massimiliano of Naples. The explosion of the bomb wrecked one of the drums and pouf! . . . tomorrow the astronomers will tell us how many microns we have kicked the earth out of its orbit. The shock must have been felt, or at least detected, for thousands of miles. About sixty drums . . . of liquid hydrogen, remember . . . exploded in the same second."

"Sixty drums . . . six thousand pounds . . . that's only three tons. I thought you said you had five tons of the stuff."

"The other two tons, forty units, had already been installed in the rocket, in one part of the vacuum sealed tail-section. As neither oxygen nor fire can reach it, it cannot explode. The liquid oxygen that will be necessary for the combustion of the hydrogen in outer space is not to be installed until the last moment, to minimize the already improbable danger of a premature explosion."

Boyd half-smiled, ironically.

"Let's hope it's an improbable danger," he commented. "This recent explosion seems to be a bit premature."

"How badly was the rocket damaged?" asked Huston.

"Not very badly. My message this morning was perhaps a little panicky. The greatest losses are perhaps the death of MacAndrews . . . I liked the man . . . and the disorganization of the workers. Most of the men in the nearby buildings were killed, and half those not killed were injured—many badly. Doctors have been coming from everywhere in response to my call for aid. Many of the men were killed merely by the concussion, poor devils, and several hundred others have nothing the matter with them except burst eardrums. Modern medical science will soon fix them up."

"How long will this delay the rocket?"

"You've taken one load off my chest, Mr. Huston. I was afraid United Utilities was going to stop work, and it's been the dream of my life to go to Venus since I discovered there was life there."

"We have other reasons for wanting to go to Venus," said Boyd. "We are fighting an organization that is trying to drive the world into war, and in some way that organization is connected with Venus. Pardon me, Mr. di Bargi, but you haven't answered the question Mr. Huston asked."

"WE had intended to finish within a month, sir, but now, I don't know. In a way, we have been lucky. All the shops and factories that were destroyed were the ones we were nearly through with. We have been building the rocket more than a year now, and it is almost complete. You know that from the fact that we were installing the hydrogen, which is the next to the last big job. In six weeks we can be done, still in time to take advantage of this year's astronomical advantages, if we rush. The liquid oxygen factory . . . the farthest to the south . . . has been very efficient. We have nearly all the liquid oxygen we need, and we got it much sooner than we expected. With a few radical changes, we can convert the oxygen plant into a hydrogen plant, for the process of liquefying a gas is about the same, no matter what gas it is. We can continue the job, if we can get men who will work in the vicinity of hydrogen after what happened this morning. I can tell you one thing. From now on we are going to redouble precautions. If it's humanly possible to store liquid hydrogen safely, we'll do it."

"Doesn't it tend to gasify, producing pressure?"

"Yes. Quite a terrific pressure, if it gets a chance to gasify. To prevent it from doing so, we have to do one of two things. Either we have to keep it very cold, not more than 20 or 30 degrees, absolute; or else it must be kept under very great pressure, pressure great enough to overbalance the pressure it produces while vaporizing. We do the latter; keep it in the closed Massimiliano drums. You understand the radical principle of their construction, which permits them to withstand pressures as great as ten thousand or more atmospheres from the inside?"

The two men nodded. Di Bargi continued seriously.

"I wish they could withstand that much sudden pressure from the outside. If they could, the bomb could never have wrecked the first drum; even it couldn't have set off the others."

"What do you need?" asked Huston.

"Money and men."

The vice-president replied gravely. "Perhaps, before many more days, this corporation will be in the hands of the three Dornn brothers of Vienna . . . the ones we are fighting, di Bargi. They are already asking the Supreme Court for an injunction forcing me, and the Board of Directors, who are in sympathy with me, to hand over at once the control of this world-wide organization to them. And we have good reason to think that it is the Dornns who are responsible for the bombing today. If you'll reflect a moment, you'll see what you're up against. But within an hour, there will be fifty millions of dollars at your disposal, and I'll try to obtain men for you. As long as I'm at the head of United Utilities you are to go ahead with your plans at top speed, and you will have ample cooperation from the main office."

"All right, Mr. Huston. I hope you stay in control."

"At present, it doesn't seem probable. Mr. Boyd's legal staff is trying desperately to find some valid legal delay, but courts are not so slow as they were a couple of hundred years ago. We still have one card to play. As soon as Mr. Boyd gives the word, his lawyer in New York will file an accusation that the Dornns were responsible for the death of Eugene Chilton. We know that it was an agent of the Dornns who did the actual killing. It will be difficult, perhaps impossible, to establish legal proof of that. Probably we won't be able to, but at least there will be delay. I tell you this so that you can see exactly what we want. Rush this rocket. Get it done before I am forced to give over the control of the corporation."

"I'll do my best, Mr. Huston," replied di Bargi. Then, to a large man in overalls who had just approached, "What do you want, Benson?"

"One of the foremen wants to see you, sir."

"I shall come presently."

During the entire conversation, the three men had been walking along the edge of the airport toward the brick structure that was United Utilities' Hudson Bay

Office Building. Di Bargi led the way inside and asked the other two to wait for him. Before he went to see what the foreman wanted, he gave Huston a copy of the partially completed report, and Huston read it with close attention while di Bargi was gone. Burton Boyd seemed to be lost in thought. Then he heard the hum of an airplane. He recognized it, leaped up, and dashed out of the building. His ear had been good. The plane was what he thought it was.

It was a heavy biplane, painted crimson. The color seemed to have been chosen to get the most conspicuous effect possible. It was impossible to mistake a plane of the Universal News Company. They were on the job with television and radio units, to show the world what had happened at Fort Severn. Boyd was surprised at their lateness. The Universal News hounds were usually present when the news was happening or shortly after . . . not hours later.

The crimson plane landed. As it touched the ground, a crimson truck ran out of a compartment of the fuselage, whose door automatically let down to form a runway to earth. The whole thing was an efficient unit. The radio and television apparatus was in the truck, which could travel anywhere on land, or could drive right into the plane and take wings. Boyd waved at the truck. It drew up to him. He noticed the number on it, a large white "13," and a sudden plan came to him. He was well acquainted with the newsmen, and he knew well Benny Jacobs, the captain of Unit Thirteen.

Boyd leaped on the running board. "Shut off the mike, Benny," he shouted commandingly. "I've got to speak with you before you broadcast this news."

"But Mr. . . . Mr. . . . Mr. . . . Boyd, the whole world is waiting for the television . . ."

"The world can wait. Tell your radio audience to stand by."

Benny snapped a switch. "As you say, Mr. Boyd, but what are you doing here? And why shouldn't I broadcast legitimate news? . . ."

"I'm asking the questions, Benny. You seem to be late. What kept you?"

"We didn't know anything had happened. We thought it was an earth tremor; in fact, we broadcast that it was. Then a couple of seismographists said it wasn't and gave us the dope on the location. Just then we got news from our local men and the main office sent me up here. I'm the nearest television unit. And I bet the office is swearing at me now for not . . ."

"Will any of the other news-services be around?"

"No. The companies agreed to syndicate this event. I'm covering it for all the world. But you're wasting my time. I'll be fired. Why can't I . . ."

"I'll see that you're not fired. Did you broadcast any ærial views of the disaster?"

"We tried to, but you see that flurry of snow. The main office, on the radio check-back, told me that they weren't clear at all. I said I'd go right down and get close-ups that wouldn't be blurred."

"BENNY, I'm wrecking your job because this is a matter of great importance. This was no accident. Somebody tossed a bomb through a window. The explosion came off sooner than that person calculated, and I think he's among the dead. But I want the people who are really responsible to believe that they were successful. I have no right to force you, but we've worked together before. You are going to deliberately falsify this news. Exaggerate it. This snow flurry is getting worse.

"Benny, you see that place there where the hydrogen plant used to be? There's nothing left but a little of the foundation. With this snow, it will be easy for you to make the world believe that that is the ruin of the hangar. Show some of those twisted masses of metal from the factories that were ruined, and say that they are fragments of the rocket. Make the destruction seem complete, and state that United Utilities is not going to continue its project of reaching Venus. Avoid shots from angles that will show the undamaged shops and the hangar. Talk it up big. You can get lots of human-interest stuff. They're still recovering bodies from the wreckage . . . the bodies that are all in one or two pieces . . . and in a few cases they may find and save some who are still living. You can get plenty of news. Make this thing bigger and worse than it is, and say that the corporation is quitting. Do this for me now, Benny, and when the rocket really leaves, I promise you that you and your gang will be the one news-unit to go with us. You'll have the biggest scoop that any news-gang could dream of.

"Are you with me?"

Benny turned to the other two of his unit, who had been listening intently. The driver nodded his head, and the announcer agreed volubly. Benny cut his flow of words short.

"We'll do it, Mr. Boyd. I know Bill, our pilot over there in the plane, will agree, so that makes it unanimous. We'll do an artistic job for you. While the televisor broadcasts the scene, it also makes the sound-movies from which the newspaper stills are made. The theatres use the talkies, and the newspaper syndicates take the story from our announcer's broadcast and print it for the people who weren't listening in, so you see you have every line of news stopped. All right, gang, let's do a good fake."

The imperturbable announcer clicked a switch and talked into his mike. It was easy to see that talking was his strong point.

"Ladies and gentlemen, this is unit thirteen of the Universal News Company, broadcasting over a world-wide television syndicate. We regret that an unfortunate accident to our televisor has caused you this bothersome delay of five minutes, but we are now ready to shoot, and will soon show you the most terrific accidental disaster in modern times. Our truck is now moving toward the ruins of the immense hangar of Fort Severn, where the ill-fated rocket was being kept. We regret the thickening snow-fall, but we shall do our best to secure clear images . . ."

And so on as the truck moved away from the hangar toward the ruins of the liquid hydrogen factory. Burton Boyd smiled. He knew that the Dornns were probably listening in to see what success their plan had obtained, and he knew that the clever Benny Jacobs and his gang would make the world believe that the damage was fifteen to twenty times as bad as it really was.

Di Bargi and Huston approached him. Di Bargi's face did not show any unusual excitement, but Boyd was startled at the expression of horror on the countenance of the vice-president.

Huston spoke:

"Come with us, Burt. We've found something."

CHAPTER XIII

Death and a Laugh

FIVE minutes later the three men stood near a gang of workers who were taking the bodies from one of the damaged factories, the factory just south of the liquid hydrogen plant.

Under a twisted steel girder and a mass of masonry was the body of MacAndrews. Burton Boyd glanced at it first, then looked again and swore under his breath.

The side of MacAndrew's head had been crushed in precisely as if someone had hit him with a sledgehammer. Otherwise his body was not much injured by the wreckage.

"He was dead before the explosion, Bob," said the detective slowly. "It wasn't the explosion that did this. I know that ghastly trademark too well. I wonder. . . ."

A shout from one of the men working twenty feet away interrupted his conjecture. Followed by the others, he ran over to the group of solemn-faced workers. They had just removed enough debris to uncover another body. The legs were crushed horribly to the hips, but the torso, arms, and head had in some manner escaped mutilation.

It was the body of a tall girl. The face was not feminine or attractive, the features were plain almost to the point of homeliness, but the face showed intellectual power, brain-force.

Boyd looked at Huston inquiringly.

"Yes," said Huston, "it's she. Laura Ives."

Boyd saw a trace of color in the face. He stooped and flexed her arm, felt for a heart-beat. "Call one of the doctors," he commanded the foreman of the group of workers. "No rigor mortis, and she's warm yet . . . warm in this cold. She hasn't been dead long."

The doctor arrived and glanced at the body. "I'm afraid there's no hope," he stated.

"Doctor," said Boyd, "you are familiar with the use of adrenalin?"

"Yes. But in this case even that could not avail . . ."

"To restore life, no. But to restore a few moments of consciousness, yes! This girl has knowledge, evidence, upon which may hang the fate of millions of individuals. It is supremely important that we have a statement from her. If, by the injection of the maximum dosage of adrenalin, you can stimulate her heart to activity for a few fleeting moments, and bring back consciousness for a short period, you will be performing a great service to humanity."

The doctor stooped over the girl, made a tiny incision. "By Jove, it's possible. The blood's all right. She hasn't been dead long. She's not really dead yet. The chance that she will recover consciousness, however, is not large. Some of you men lend a hand with a stretcher."

They took her to the factory, which was being used as an emergency hospital. While the doctor, assisted by some of the relief workers, was trying to revive the girl, Burton Boyd prepared a recording instrument, based on the principle of the telegraphone, to take down whatever she might say. Then there was a period of impatient waiting.

"Her heart is beating now, Mr. Boyd."

He went to the side of the table where she had been strapped. There was color in the cheeks, the bosom rose and fell slightly. The miracle happened. Groaning with pain, she opened her eyes. Boyd felt a surge of pity, but steeled himself to his task.

"Laura Ives, did you kill Eugene Chilton?"

For a long second she looked at the man. "Yes," she said suddenly. "And Ives and Jones and MacAndrews. I threw that bomb. There you have it all, and what good will it do you, fools?" From her lips came a long, hysterical laugh . . . a laugh of triumph and unhidden hate. The doctor bent over her to try to quiet her. None of the watchers saw exactly what happened. One short cry of pain came from the medical man. He sank down in a crumpled heap. His skull was crushed in. Laura Ives sank back. Her laugh ceased. The drug had done its work.

One of the doctor's assistants sprang forward at the same moment that Burton Boyd did, and the two men collided. The telegraphonic instrument was knocked out of Boyd's hands. It fell near the doctor's crushed skull and was fouled with his blood. Boyd recovered it with a sinking heart. The jar it had received had dislocated the spool of fine copper wire, but had not stopped the electromagnet. As a result, the magnet had erased its own work, had destroyed the evidence in a few seconds. Evidence! With the testimony of his operatives and that of Ecclestone, Boyd needed only that statement of Laura Ives to invalidate Eugene Chilton's will; now he had only the unsupported statements of himself and Huston and the few workers at the emergency hospital. Perhaps that would be enough to prevent the Dornns from obtaining the company, and perhaps it would not. If only the thing hadn't fallen . . .

After a trial of the telegraphone to be sure that it was worthless, he gave his attention to the tragedy that had just taken place before his eyes. He saw something he had noticed before when he had first seen the girl's body, but to which he had paid no attention. On her right hand was a half-glove of vanadium steel, jointed and flexible, covering her knuckles. It was bloody. Apparently, she had just hit the doctor with her mailed fist, yet Boyd knew that such a blow, even by the strongest of men, could not crush the skull so completely. And she had been weak . . . brought back to life for a few moments by the drug, and lacking the power to hold on to that life. Boyd shook his head. Something was still unexplained. With no more evidence than he had, he could see that the court would not credit his explanation of the deaths as due to Laura Ives. He could establish her connection with the Dornns, but how was he to prove her guilt, even though he had actually seen her strike the doctor with the "knuckles" and had seen the crushed skull? Yet the others had been killed in the same way . . . skulls crushed in. Laura Ives had admitted killing them . . . Eugene Chilton, President of United Utilities; Harrison Ives, her own brother; Jones, Secretary of State; and MacAndrews, the Corporation's district manager, and the doctor. Why had she killed the doctor? Boyd could understand the murders of the others, but she had killed the doctor merely as a taunt, a defiance . . .

ANOTHER thought came to Burton Boyd. If she could possess the muscular power to so kill a man, she could also throw a heavy bomb with enough force to carry it through an "unbreakable" glass window. Yet it was impossible. He flexed the slender arm again. No trace of superhuman strength here. Boyd gave it up.

Something fundamentally important was still lacking. He could not understand.

He searched the girl for that instrument her brother had made, the marvelous portable device, product of the genius of Harrison Ives, that disturbed for a short period atomic and molecular structure sufficiently to allow two solid objects to occupy the same space at the same time, the device with which Laura Ives had walked through solid walls to commit the killings without being seen.

It was not to be found.

The bodies were removed by the workers, who had enough on their hands with the injured workmen continually arriving on stretchers, some to live and some to die in spite of the medical science of the twenty-second century. Boyd and Huston left, just as Benny Jacobs and his gang brought their television unit and their mike into the emergency hospital to provide the news-hungry world with some choice "human-interest material."

Benny took Boyd aside, out of the range of the mike.

"Everything's fine, Mr. Boyd. If the guy responsible for this is listening in, he's patting himself all over the back and wearing out his ears with congratulating himself on the completeness of the damage he's done. Remember, when you pull the sensational surprise announcement about the rocket, News Unit Thirteen is the gang that's going with you."

"Aren't you afraid, Benny?"

"Was I ever afraid of anything, Mr. Boyd? What a scoop we'll have! The first interplanetary voyage; television, radio, newspaper, and talking picture effects by Benjamin Jacobs. Remember, we get the exclusive rights . . ."

"Don't worry, Benny. Mr. Huston, here, is the big boss. What he says goes, and he'll keep my promise all right."

"Thanks, Mr. Huston. I better get back to the unit. The main office congratulated me on the check-back about my quickness in repairing that damage to the 'visor,' and my thoroughness in covering this terrific accident with only one unit. All the others were too far away to be sent in time, and after we got started, the office decided that we didn't need any help. I never put over a bigger or better fake."

Benny left to rejoin his "gang," and Boyd and Huston walked through the thickening snowfall past the crimson news-plane toward the silver-gray UU-7. They entered the plane's heated cabin, threw off their electrically-heated overcoats, and sank down in the luxurious chairs. The pilot took off smoothly, rising at an angle better than forty-five degrees, and the flagship of the corporation's air-fleet was soon roaring southward to New York. Burton Boyd took the radio-phone and got in touch with his office.

"Hello . . . Connect me with Brownestone, please . . . Hello . . . Brownestone? . . . This is Boyd speaking. Prepare at once a formal statement that Aloysius, Albert, and William Dornn are responsible for the death of Eugene Chilton; and, secondly, that they are therefore not entitled to inherit his property, the controlling interest in United Utilities; and, thirdly, that the actual murder was done by Laura . . . L-a-u-r-a . . . Yes, Laura. The full name is Laura Ives. I-v-e-s, yes, Ives. Got that? . . . Goodbye."

He turned to Huston. "We may not be able to establish all of that," he said, "but we can at least throw a shadow over the Dornns' claims. They had him killed. She did it. How? Hit him with her fist and a steel glove. Believe it or not . . . It does sound fishy, doesn't it?"

"You saw what I saw."

"Neither of us knows what we did see, Bob. The whole thing's queer. Chilton disinherited his nephew because of a quarrel, and willed the company to three Europeans because they once saved his life. Then they have him killed to get his money to make war on America. The girl kills her own brother, steals his atomic power process and sends it to them so that it will be a nice thorough war."

"We had some luck there."

"Yes. Harrison Ives wasn't so impractical or careless as everybody seemed to think. He knew the value of that thing, so he coded the invention. The Dornns went to Ecclestone to get him to solve it. Luck! Now Ecclestone has it and they haven't, though they think they have . . . It must be some code if Ecclestone can't solve it."

"I've been thinking, Burt. We know the Dornns are connected with Venus in some way, and that they intended to send the process there. Why should they want to destroy the rocket? It's not exactly clear. I wonder if they're afraid that we'll go to Venus and find out something . . ."

CHAPTER XIV

The Secret of Izanne

THEY fought in the corridor with the strength born of desperation—Lee Chilton with two swords and beside him Meriden the Sarvonian with only one. They were cornered in the L of the passage between the storerooms and the laboratories of the steel city of Cor, surrounded by dozens of their enemies, Corian guards armed in the Venerian fashion, with a sword in each hand, but no shield or armor. Neither the earthman nor the mighty Meriden was yet wounded, yet the unequal combat could have only one end.

Then the two suddenly became conscious that there was a third between them. A shrilly commanding voice bid the attackers stand back, nor did the Corians hesitate to obey when they saw what was in the upraised hand. Lee Chilton looked, and saw Izanne, the girl Meriden had bidden stay in Sarvon . . . Izanne, cheeks red through the deep tan. She held a fragile sealed globe half the size of a man's head, and filled with a cloudy white liquid.

"It is bacillus three-four hundred," she said in Corian. "Stand back, warriors, lest I should break the flask." The Corians eyed the girl in awe. They knew not whence she came, but they knew of bacillus three-four hundred, a micro-organism developed in the laboratories by the scientists, carrier of a hideous flesh-consuming disease that knew no cure. The germ was active, virulent, hard to kill. Even floating in the air it was deadly. The warriors knew that the girl would endanger herself and the other two if she released the germ, but they were afraid that she might possibly carry out her threat. They did not fear death by the sword, but the disease was a different matter. They stood restless, uneasy.

In her other hand she held two leather straps, each of which was attached to a large black metal case. She

gave one to Lee and the other to Meriden. They noticed a third strapped about her waist, and lost no time in strapping theirs likewise.

"Push the stud," said the girl. Wonderingly they looked closely at the cases and saw a tiny stud on the top of each. They pushed these as directed.

A horrible nausea overwhelmed Lee Chilton as he took his hand from the stud. A deep ruby red light seemed to be before his eyes. This changed slowly to orange, and to yellow; then more rapidly to green and blue and violet, meanwhile increasing in intensity until it was blinding. Then it disappeared. He saw Meriden and the girl beside him, the warriors a short distance away, everything as it had been previously, but reversed in shade like a photographic negative. The effect was weird, almost unnerving, but Izanne's reassuring voice came to Lee's ears. "Come," she said, "there is no time to lose."

And she turned and walked directly through the solid wall. Hesitatingly, Meriden and Lee followed her. When they reached the wall, they could not feel it, but as they entered the space where it was, they were suddenly in thick blackness. They saw nothing but continued to walk straight ahead. In a few seconds they were again in the light, in a deserted room. At a word from Izanne they pulled out the depressed studs.

The overwhelming nausea returned, and their eyes were blinded with violet light. It changed to blue and green and on down the spectrum to disappear in the infra-red. The sickness passed, and vision was again normal . . . the reversal of black and white was gone. They had walked through a solid wall of steel.

The girl stooped and picked up something from the floor. It was a sword-belt; from it hung the triplicate scabbard that held the three swords of Meriden. On the hilts were jaguars, carefully wrought in steel and gold. "I traced you," she said to the swordsman. "You left these in Sarvon. I brought them, in case you have need of them."

Meriden threw down the plain sword he had been holding and took the three weapons he knew so well. Exactly balanced were the swords of Meriden; he could hurl one of them a hundred feet and split a sapling. Heavy and keen were they; no three men on Venus could stand against the giant when he had one of these swords in each of his enormous fists.

A door of the room opened and one man entered. Seeing them, he drew a pair of swords. Meriden took two of his and leaped forward, but Lee Chilton, who had been nearer the entrance, had acted more quickly.

He was not a Venerian sword-fighter. He acted by instinct. Before the man could effectively bring his swords into use, the earthman had landed a crashing wide-arm swing on the Corian's temple, and had stepped back, amazed.

His fist was gory. The skull of the Venerian had been crushed as though it were an eggshell. Lee Chilton stood stupefied with amazement at his own muscular power.

Izanne went to the door and locked it. "This room is not much used," she said. "I think we will be fairly safe here until the search for us dies down."

Lee was still bewildered. The girl noticed it, and undertook an explanation. "On your world," she said, "there is an animal called the baboon, a kind of ape. This animal, I am told, weighs less than a man, but it has from eight to ten times the strength of a strong man. Why? Its muscles are not superior to those of a man, but the ape is able to use them more completely. Here on Venus some of the scientists, my associates, say that the muscles of a man have many times as much strength inherent in them as the man is able to use; the man has not sufficient nerve-force to make use of the true force of his muscles. You, Lee Chilton, were transferred from Earth by the Corian scientists. Your identity is now occupying the body of a Corian, and his identity is on earth, trying to lead the earth into war, I suppose, as are the other Corians who have made the cosmic transfer. Though we Sarvonians have not penetrated all the secrets of the Corian scientists, we know that their device for interchanging the structure of the brain-cells, and thereby the identity of the two using it, also has a peculiar effect upon a certain section of the brain and the spinal cord As a result the nerve-force of the two individuals in each other's bodies is greatly increased, which in turn increases the muscular force. The body that is now yours is by no means a weak one, and your fist was traveling much faster than you could possibly realize when it hit this unfortunate's skull."

Lee actually paid little attention to the girl's explanation, but he gave a lot of attention to the girl. There was something almost out of place in the scientific explanation from the lips of a young girl so beautiful. That tantalizing fact, that had been in the back of his mind ever since he had first seen the girl, was very close now. He knew that something in his subconscious mind was trying to come to the surface. There was something about her that was trying to force itself on his consciousness, particularly when he saw her eyes. What was it about her eyes that was different . . .? What was the mystery about this girl of the scientific aristocracy of Sarvon that tantalized him . . .?

SUDDENLY he knew. He looked up and caught her eyes again, and he was sure. She was an earthgirl. She had been transferred the same as he. Meriden had gone momentarily to the door, was peering out to see if anyone was in the corridor. In a low voice Lee accused Izanne in English of her alienship. She started, looked at him with searching eyes, and he was more sure than ever. The earth-brain, the earth-identity behind those eyes, had betrayed itself.

"I am," she said simply. "But please don't tell him." She indicated the giant swordsman.

"I won't," replied Lee, "if . . ."

"If . . ."

"If you'll tell me your real name. Izanne sounds very nice, but I'd like to know you by an earthgirl's name."

"Laura Ives. But remember, now, you've promised to keep my secret. I'm Izanne of the Hot Planet now."

"And the Laura Ives on earth is a Venus-girl?"

"Yes. I'm terribly afraid that my brother . . . that she may have harmed him . . . but here comes Meriden. I'll speak to you later, Lee."

Their conversation had been in English, so the giant could not have understood it. He reported that the corridor seemed clear, and his knowledge of the alien city again served them well.

"We are not far from the council room," said Meriden. "It is very spacious, and there are large steel girders near the ceiling. If we could enter it when no

one is there and in some way get up on those girders out of sight, we could spy on the meeting of the council, and perhaps find out about the weapon they are planning to use to wipe out our Sarvon and your earth, Lee Chilton."

"How can we get up on the girders?"

"That is the problem. There is no other place in the council room where we could hide, and perhaps no other place in all Cor where we would have so great a chance to overhear the plans of the rulers. Seven hundred paces down the corridor to the left is an electrical storeroom. If I could get a coil of unused wire, and if there were no one in the council room, we could take the wire there, throw the coil up over a girder, and climb, pulling the wire up after us. Then we should have to wait, perhaps many hours, until the Council met.'"

"Where is the council room?"

"Less than half a mile down the corridor, to the right. I shall first have to go in the opposite direction for the wire."

"If you walk through the wall to get the wire, Meriden," cautioned Izanne, "be sure not to leave the stud down for more than a few moments."

"I'm going too," said Lee. "Two will be better able to cope with the guards you will probably meet than one."

"No," said the giant. "One of us must protect Izanne."

The girl was about to say something, but thought better of it, and was silent. Meriden cautiously opened the door and left. He had not proceeded far when a guard at an intersecting corridor saw him and hurled a sword. Meriden did not fend off the flying weapon with his own sword, but merely pressed the stud on the device at his waist. The field of the machine's influence surrounded him. The guard saw his sword pass completely through Meriden as if the latter were a ghost. As the guard was not one of those in the other corridor who had seen the three pass through a solid steel wall, he was stupefied for the moment that was his undoing. Meriden pulled out the stud, fought off the nausea, and hurled one of his own swords with all the force in his muscles. The astounded guard did not even gasp as he fell, so clean was his death, so accurately had Meriden's heavy weapon penetrated his heart. The Swordsman of Sarvon smiled ironically and recovered his sword, carefully using the guard's tunic to wipe the blood from the blade and from the snarling jaguar's head wrought on the hilt by some artisan of former days. Then he proceeded to the room where he knew the electrical supplies were kept. He did not try the door, but walked through it.

As Meriden had left the room where they were now hiding, Lee Chilton had turned to Izanne.

"Do you think there is much chance that we will be found here?"

"I don't know. When we went through that wall they lost track of us, and there are so many seldom-used storerooms and laboratories in this part of Cor, so many places where we might be hiding, that they may not get around to this one until we have already reached the council-room and hidden on those girders. Meriden knows much more about this city than I do."

1. All through this account English units of time, space, etc., have been substituted for the confusing Venerian system.

"It's a queer civilization, isn't it?"

"You see, Lee, we look at it from the earth's point of view . . ."

"I MEAN this: These Venerians are so incredibly far ahead of us earth-people in some sciences, and are so far behind us in others. For instance they can interchange identities over millions of miles of space by interchanging the chemical structure of the most complex and highly-organized form of matter known—the human brain-cell. To do this, as they did in the cases of you and me, they went into the infinitely complex chemistry of thought, the chemistry of protoplasm, the chemistry of the soul itself. And yet, because they apparently never discovered gunpowder, a simple mixture of three common substances, they still fight with swords. I've been expecting to see bows and arrows, but apparently that has never occurred to these scientists either. It's not consistent with common sense. How could they accomplish what they have and yet be so far behind otherwise? You can't do advanced algebra unless you have mastered simple arithmetic."

"It's not so impossible. On earth, who were the greatest builders and mathematicians of ancient times? The Aztecs, the Mayas, the vanished races of Central and South America. Their mathematical system was astoundingly complex and advanced; their calendar was much more accurate than the one we use. It measured time accurately over periods of thousands of years. They knew much of astronomy; their great buildings, stupendous works of architecture, still astound scientists;[1] yet we know that they never discovered the simple principle of the arch. In all the amazing, mysterious ruins they left when they vanished, there is not one true arch.

"Or another thing, Lee. The greatest shortcut in mathematics, logarithms, so indispensable in astronomy and all forms of engineering, depends directly upon the theory of exponents. Logarithms are exponents, and we can understand and use them because we know the laws governing exponents. Logarithms have been a very great aid to science. Yet it is an historical fact that logarithms were discovered and used by mathematicians *years before exponents were even thought of.* To anyone with a fair knowledge of mathematics, this seems almost incredible, but it's true.

"So you see, this civilization isn't unbelievable or exceptional. They are, it is true, lacking in the science of inorganic chemistry, yet their metallurgy, their physics, and their organic and protoplasmic chemistry are highly developed. Also, on earth, science is the property of everyone, but here the social structure is different. The scientists and the builders, whose predecessors built these two unified city-structures of steel, form an aristocratic class who keep their science to themselves, both in Sarvon and in Cor. Xavian, who gave Meriden permission to come on this errand, is an aristocrat; Meriden is not. He is a swordsman, one of the lower class, though he is exceptionally intelligent and has been educated far more than the average swordsman. He is in the confidence of Sarvon's rulers."

"Their peculiar scientific development still seems incredible. This thing that you brought, for instance. It must involve science tremendously advanced . . . principles of atomic and molecular physics greatly in advance of science on earth. . . ."

"Wrong, Lee. This device refutes the law of impen-

etrability of matter; it allows two things to occupy the same place at the same time. And it was invented on the earth by Harrison Ives, my brother. Because I remembered what he had told me about it, I was able to help the Sarvonian scientists duplicate it here on Venus. You remember when Grantolon sent for me, just before you left Sarvon? He had completed six of these instruments, and they were successful. He sent for me so that I could see what our cooperation had accomplished. I came to Cor, alone. I wanted to be in on this adventure, and in Xavian's hasty decision he didn't consider the fact that in order to spy upon scientists, a spy should have more scientific training than either you or Meriden possesses. So I came. It was easy to escape everyone who challenged me by merely walking into a wall.

"I led a number of them a merry chase. I located you by overhearing conversation between some of the men from whom you had escaped. I guess that explains everything."

"For a young woman so beautiful, you are much too scientific, Miss Ives. Or Izanne, rather. Here comes Meriden."

Meriden appeared coming out of the wall near the door. He pulled out the stud of the metal box at his waist and stood still for a moment while the nausea lasted.

"I expected to see a set of flashing colors," said Lee.

"They only appear to the person using the apparatus," said the girl. "It does some queer things with light as it temporarily changes the atomic structure of the retina. The change is only in the eye. That was the one thing my brother could not predict from his calculations, when he invented the device. I can't explain it exactly. . . ."

"I have the wire," said the giant, approaching them with a smile of success. "There seem to be a few guards in these corridors at present. We may be able to get to the conference room."

Half an hour later, after they had traversed about half a mile of the seldom-used corridors among the storerooms, and Meriden had killed a couple of unfortunate guards before either of them could whistle an alarm, they reached the locked and deserted council room, entering through a door with the nonchalance born of their mastery over matter. At one end of the room was a raised platform on which was a semicircle of nine chairs. The rest of the large room, the part with the lower floor-level, seemed to be a combination machine-shop and laboratory. Here the council of nine could watch while the scientists demonstrated some new device or machine. Here was the receiving end of the interplanetary radio with which they kept in touch with the three Corians who possessed the bodies of the Dornn brothers. Delicate instruments and ponderous machines were here. Girders running horizontally from side to side of the room supported some fixed pieces of apparatus and also movable cranes by which large objects could be lifted and carried from one part of the room to another.

Meriden removed a coil of wire which was slung over one shoulder, retained an end, and hurled the coil toward the lofty ceiling of the room. The wire passed over a girder. The Sarvonian secured the other end, and, holding both of them firmly, climbed hand over hand until, with an audible grunt, he reached the girder and clambered upon it. Lee followed easily with the supernormal strength that was the possession of those who had traded bodies. Meriden called to the girl and told her to tie the wire under her arms so that she could be lifted. Instead she ascended the wire with the same ease as Lee. They pulled up the thick wire a moment before the door below opened to admit two men of the scientific class of Cor . . . slender, almost delicate in physical build . . . running more to brain than to muscle. They crossed the room to the recording radio receiver and examined several disks inside its cabinet. Then they sat down on a low bench and conversed in tones too low to be heard by the three lying flat on the girders above. They were obviously waiting for someone to arrive, and it seemed to Lee that they were waiting an eternally long time.

THE mystery of Izanne still puzzled him. Why didn't she want their friend, Meriden, who loved her, to know that she was an earthgirl? And the Corians, who were responsible for the transfers, killed the earth-identities that were transferred to Venus, except those which had been saved by Meriden as he and as the Dornn brothers had been saved. Yet Meriden was ignorant of the fact that she had been transferred, thinking her one of the aristocracy of Sarvon. The Corians didn't want earth people on Venus. All they wanted was Corians on the earth. Xavian of Sarvon had told Lee that all of the earth-identities on Venus had been saved by Meriden from death at the hands of the Corians. Yet Laura Ives had been transferred to Venus at the time when a Corian girl had taken her body on earth, had obviously escaped death at the hands of the Corians, yet this was unknown to Meriden, to whom she was posing as a Sarvonian aristocrat. How had she escaped Cor and come to Sarvon in the first place without Meriden knowing about it? Xavian, ruler of Sarvon, evidently knew. He had said that he was keeping her secret. Yet at another time, when Izanne had not been present, he had told Lee that the girl was the future bride of Meriden. Meriden himself had little hope of winning her because of the difference in their stations, yet the girl wore his device . . . the steel and golden jaguar . . . and on the buckle of the broad finely-tanned belt that encircled her waist. Something, decided Lee, needed to be cleared up.

The door opened again, and nine blue-robed men entered, surrounded by a strong guard of swordsmen. Three of the men were very old, and none of them were young.

A number of other scientists followed the guard. The nine took their places on the platform, with the soldiers standing behind their chairs. The scientists busied themselves with uncovering a large electrical instrument on a heavy, solid, low table, almost directly beneath the three watchers.

Wires led from this instrument to a projector which looked to Lee like a small searchlight, and was mounted so that it could be turned in any direction. The scientist adjusted it in the direction he desired and then turned a thumb-nut that locked it rigid. Some of the others set up a solid black screen of unusual thickness fifteen feet in front of the projector. The arrangement permitted the nine on the platform to see both the projector and the screen.

One of the nine spoke:

"You are ready, scientists?"

"We are ready," they answered.

CHAPTER XV

Fatigue

THE scientist who seemed to be in charge explained his advice to the council.

"We have here the means of producing a ray, invisible, that has no effects upon the human body, but has very peculiar properties. If the Council will command a warrior to give me one of his swords, we can make an immediate demonstration."

At a word from one of the Council, a guard handed one of his three swords to the speaker, who placed it in a clamp which he attached to a movable stand. He put the stand between the projector and the black screen. Another man, at the instrument, moved a rheostat. Apparently nothing whatever happened, but after three minutes the current was shut off, and the first scientist approached the stand and tapped the sword lightly with a small ruler he held. The steel sword snapped like brittle glass. Several fragments fell to the floor and smashed into smaller bits. With a smile, the scientist continued his explanation.

"For many years we have been trying to find out what causes metal fatigue. From time to time some part of Cor would collapse, apparently without cause. This happened only at rare intervals, and the damage has not been great. But we were afraid that some day the entire city would collapse, so we have made careful investigations of this phenomenon. We have not yet found out what causes this to happen to steel after it has been in use for several years, but we perfected a way of artificially producing a metal fatigue many times as great as that which occurs naturally.

"That screen is made of a material that prevents the passage of the ray; I used it so that this demonstration would not injure any part of the steel room we are in.

"You know that Sarvon is a city like Cor—one vast structure of steel—and with this weapon we can destroy it. If we can project this ray on the lower levels of the city, the foundations, the whole immense nation will collapse, literally speaking. We are now working, Members of the Council, on a projector to be mounted on a large airship. Of course, it will be a much more powerful device than this demonstration machine——"

It was with difficulty that Lee Chilton, above, suppressed a gasp. He knew that on earth, once in a great while, a bridge or structure of steel would collapse, for no apparent reason. He knew of metal fatigue and of the attempts of scientists and engineers to find the cause of it, but it was nothing like the demonstration he had just witnessed. The master scientists of Cor had produced metal fatigue to the *n*th degree. Practically speaking, their ray destroyed most of the cohesion between the molecules of the steel. It produced microscopic cracks and breaks in the metal. If the immense girders that supported Sarvon were subjected to it——

But it was a double-edged weapon. If they could secure it and use it on Cor——

One of the two men who had first entered the room now approached the platform. "I also have news for the Council," he stated grandiloquently.

"Speak."

"My group of scientists has perfected the instrument with which we made the transfers. We can now operate it anywhere successfully, and we will not be forced to take it out of the city to that cave in the mountains. The steel in the city does not interfere with its operation in the improved form. It was because we had to take it to that cave, far from the steel that always interfered with the ether waves, that we had such poor success with the transfers. At the cave the Sarvonian Meriden could find us and interfere, sometimes preventing the transfer and sometimes saving the earth-identity after the Venus-identity had been transferred to earth. That is why there are now several Terrestrials in Corian bodies living in Sarvon and aiding them. That has been changed. We are confident that we have overcome the interference caused by large quantities of steel, and from now on can transfer Corians to earth-bodies without danger of interference, and we can make sure that the earth-identity does not escape alive. We are still not able to transfer a Corian identity to earth without at the same time transferring a Terrestrial identity to Venus."

"When will the next transfer be made?"

"That we cannot tell. Six meteorockets, each containing the other half of this apparatus, were sent to earth about seven days ago. We always send the rockets in groups of six, and one of them is usually found by someone on the earth. It's a matter of chance exactly where they finally land. Some of them fall into the ocean, others at the frigid poles. A few, let down by the automatic release and the parachute, are found by earth-people. If the individual succumbs to curiosity and dons the headgear, the interplanetary circuit is closed. It takes a few minutes for the signal to get here, even at the speed of light, because of the great distance between the two planets. Then we render the person unconscious, determine the sex by our indicator, and transfer a suitable Corian identity to the earth. As from now on we will not be interfered with, we can immediately execute the earth-identity as soon as the transfer has been completed."

"Very good."

The scientist spoke again. "My associate, Eenedar of the meteorological department, has a request to make."

The spokesman of the Council nodded.

"Speak, Eenedar."

The other of the pair that had been first to enter spoke with an air of sureness.

"As I understand the Council's plan," he said oilily, "the identities we transfer to earth are to do everything in their power to stir up war there, so that the Terrestrials will decimate themselves, leaving the earth in a condition that will make it possible for us to conquer it when our great spaceships are completed."

"That is correct," said the spokesman. "The plan is working out very well. War is impending on earth at present, and there will be few of the earthmen left when they get finished wiping each other out. We could not conquer the terrestrial hordes now. There are too many of them. The war will eliminate most of them."

"As I thought. I, Eenedar, have been making a very close study of atmospheric conditions upon the earth, as far as I can determine them with the greatest telescopes and the most accurate photometers and spectroscopes used by my friends of the astronomical department. I believe I have discovered something, but I cannot be sure yet. It will be necessary for me to go to the earth and continue my investigations there. If the condition of the earth's atmosphere is as I suspect it to be, I assure you that I can wipe out the population of the planet in

one week's time, and yet leave it in perfect condition to be occupied by Venerians. I do not wish to disclose my suspicions until I am able to confirm them. I therefore request that I be selected as the next identity to be transferred to earth, as soon as some one of the six rockets is discovered by some curious Terrestrial. But I do *not* want the earthman who will be in my body killed. Keep him alive, under heavy guard. Whether or not I find what I expect to find, I shall want to be transferred back to Venus to my own body, so keep it alive. In an earth-body, I, too, would be killed when the population of the world was wiped out. In a Venus-body, I would be secure. As a reward for my possible service to Cor, I want to keep on living. You are having war stirred up to annihilate the earth-races, and I may be able to do that, to pave the way for our conquest, much more easily and quickly. However, I would advise that you go on with your other plans, in case I fail. Will you give orders to that effect?"

THE spokesman considered. "You deserve our trust, Eenedar. I, therefore, command that you be the next to be transferred, and that your body be kept alive so that you may return, whether or not your investigations are successful."

The others nodded. Eenedar bowed. "Thank you, Council of Nine." Meriden stirred uneasily on the girder, but none of those below perceived the giant or the girl or the other man who were spying on their secrets. Lee wished the meeting would disperse. It was becoming increasingly uncomfortable to lie flat on his stomach atop the girder without stirring an inch for fear of betraying himself and the others. They seemed to be taking their time below, however.

A soldier entered and stood respectfully at attention. The spokesman bid him speak.

"We have completed the search of the storerooms and laboratories, and can find no trace of Meriden and the two who were accompanying him. They are somewhere in Cor, however, and it would be best for the Council to always have a large guard near by."

"Spread the alarm to all Cor to be on watch. Meriden, the Sarvonian, is dangerous, and that accursed girl has something that permits them to walk through solid walls. They must be somewhere near here, for those guards we saw were only recently killed. Search again all this part of the city. I will send you a scientist who knows the secret storerooms. Search those, under his direction."

The soldier nodded. One of the scientists went out with him. The guards standing behind the Council fidgeted uneasily. They were truly brave men, but they had heard so much about Meriden that they would much rather not meet him. Stories of the prowess of the Swordsman of Sarvon had lost nothing in the telling.

Still another scientist approached and waited to be heard. He gave the report of the latest news from earth sent by the three in Vienna who occupied the bodies of the Dornn brothers.

"The three report both success and failure. The rocket being built by Terrestrials to investigate Venus has been destroyed. They promise war within a month, as they have gained political power. They have obtained a book containing instructions for liberating unlimited energy from matter, a process recently perfected by a terestrial scientist. They have——"

Lee Chilton heard a stifled gasp from the girl. He guessed, correctly, that the scientist was her brother, the same who had made the device in the box still at each of their waists.

"——and the man they employed was not able to decode the message in the book. They are sending it here by a meteorocket, which we expect in forty or fifty more hours. Our observatories will be on the watch for it, and will take care to locate its fall so that we can obtain the book."

"Why do they send the book here, if the message it contains could not be decoded by the greatest terrestrial cipher-experts? We do not know their languages well enough to undertake the task of decoding it. Even our greatest mathematicians and philologists would have little chance of solving a complex cipher in some one of the dozens of earth-languages."

"I can explain, Councillor. The person who invented this process was Harrison Ives, greatest of terrestrial scientists. Ever since we started to carry out our plans it has only chanced once that a woman happened to put on one of our helmet-like devices. We have only transferred one girl to the earth, and she obtained the body of the sister of this scientist. And——"

"I understand," said the spokesman of the Council. "We preserved her body under guard as we intend to do for Eenedar, so that she could return to Cor. But the girl in her body contrived to escape and go to Sarvon, in some manner unknown to us. The girl on earth cooperated with the 'Dornns' as we instructed her to do. The sister of the scientist is the only one who might know his code-system, and she is on Venus now, so they sent the book here."

"Yes. I have kept the three acquainted with all that has happened here. Our interplanetary radio uses frequencies never dreamed of by Terrestrials. The three at Vienna assure me that there is no chance of anyone listening in."

"Yet she is hidden in Cor now, with that swordsman! We must take her and force her to talk! No one else in the universe can tell us the secret of the book except her brother."

The rapid breathing of Izanne was audible to both Meriden the Sarvonian and Lee Chilton. There was a fear amounting almost to certainty in her heart.

Meriden had taken in every word, and was almost dazed by the knowledge that Izanne was an earth-girl.

"Her brother," said the scientist below, "is dead."

In spite of herself a sob burst from the lips of Laura Ives.

Everyone in the room looked up, and the three reclining figures were seen. "There they are," shouted the spokesman. "Kill the men, but above all, take the girl alive."

At that moment a detachment of one hundred and fifty swordsmen, summoned by an alarm button in the arm of the spokesman's chair, entered the room.

CHAPTER XVI

Events

AN ominous silence filled the courtroom. The Chief Justice of the Supreme Court of United America was about to render the decision of the Court.

"Inasmuch as the evidence of the operatives of Burton Boyd, the evidence of Boyd himself, the evidence of

Robert Huston, and the evidence of the witnesses of the deaths of Laura Ives and the doctor who was mysteriously killed by her, though it is only circumstantial, indicates that Laura Ives acted as an agent of the three Dornn brothers in the murder of Eugene Chilton, and inasmuch as the Dornn brothers' representatives have not been able to disprove these assertions, the court judges that a reasonable doubt of the innocence of the said three brothers does exist, and until such a time as they can prove that Laura Ives was not connected with them, or that she did not commit the murder, they cannot inherit the property of Eugene Chilton, that was willed to them, namely, fifty-one percent of the stock of United Utilities, which property is here awarded to the only living relative of Eugene Chilton, his nephew, Lee."

One reporter nudged another and whispered, "Good for him! That decision isn't legal in the least, but there's nothing the Dornns can do about it! This is the Supreme Court, and the justices must have decided that whether or not they had him killed, this isn't the time to give such power to any Europeans! It looks too much like war is some place in the offing. They can object all they want to, but, strictly legal or not strictly legal, United Utilities stays in American hands, at least until the international situation clears up. And I bet it won't."

"It won't," said the other with positiveness.

Huston spoke to Burton Boyd. "We've won."

Boyd shook his head. "No, Bob, we were licked before we started. Watch Lee."

The Corian in the body of Lee Chilton rose to his feet and looked steadily into the televisors and cameras.

"I, Lee Chilton, not being convinced of the fairness of the honorable judge's decision, and having no desire to own the corporation of my late uncle, do hereby declare that I voluntarily give and transfer the property in question, fifty-one percent of the stock of United Utilities Corporation, to Albert, Aloysius, and William Dornn; this transfer to take effect immediately."

The unusualness of the action created a sensation. As the people of the earth, a large percentage of whom were listening in to the trial, were totally ignorant of the alien identity in the body of Lee Chilton, they could not understand the motive for such a stupendous gift. No American could understand the action, and most of them considered it little less than treason.

"If war comes," whispered the talkative reporter to the pessimistic one, "the government will confiscate the corporation."

"Yes," said the other, "that's so."

Boyd and Huston left the courtroom. Outside they were accosted by Riccardo di Bargi. "The rocket is completed," he said. "We have provisioned it, and have finished the installation of sixty tons of liquid oxygen which will be necessary for the combustion of about seven tons of liquid hydrogen. Jacobs and his news-unit is aboard, as are the selected men. Every man is brave and trustworthy. The news gang is itching for the moment when we can spring the surprise on the world. They love sensation, and this will be a big one. Are you going with us?"

"I am," said Boyd. "I'm going to find out what Venus has to do with the Dornns; why they want war. I've been afraid all along that Venus is the thing we're fighting. I'm going to confirm that suspicion or kill it."

"I'm going, too," said Huston.

"No! The trial delayed the Dornns too long to let them profit very much by their possession of the company. As soon as this damned war is declared, United America is going to confiscate United Utilities, and there is no one who can run it as you can. You're indispensable here. I may not be able to get back, old man, but I might send you information that would greatly help the world in the hell that's coming. You've got to stay here."

They had entered di Bargi's plane, and were flying north. The professor spoke. "You might be interested to know that at last I have solved the problem of radio across empty space. Years ago, when I first tried to communicate with Venus, I had no success. My waves never reached even the moon. I know, because I got no reflection. But I find that by using undreamed-of frequencies, I can get a reflected signal from the moon! I can get signals through the 'heaviside layer.' This indicates that we will have no trouble keeping in touch with the earth. Benny's televisor will function all right with a few radical changes in the apparatus and circuits."

"Fine professor. I was afraid that——"

There was a news-machine in the plane's cabin, and its whistling note sounded to indicate that news of exceptional importance was being broadcast. Boyd snapped on the receiver. There was no television image, but the news-announcer's voice was loud and clear.

"War has been declared on United America by Confederated Europe and United Mongolia. Dictator Fu-Zhse is mobilizing three million men, and is sending sixty thousand planes with bombs, death-rays and disease germs across the Pacific. They will reach Hawaii in one hour and the western coast in two hours more."

"What was the purpose of Lee's gift?" asked Boyd analytically. "If he is working with the Dornns, it would have been better for them if he had kept the control."

CHAPTER XVII

The Cult of the Man-Child

SEVERAL minutes later the private call of Robert Huston came over the radio as the plane roared northward. It was from the Secretary of War. Huston replied, and the order from Washington rang in his ears.

"The Federal Government of United America has confiscated United Utilities. You will retain control of the Corporation."

Huston turned to Boyd with a worried and yet hopeful countenance. "You said that you were prepared to stall off this war, Burt."

"I am. Ecclestone and I have been making preparations."

"You mean Ecclestone has solved the cipher? And United America will have the advantage of atomic power in——?"

"Unfortunately not. But let me have the instrument. I'm going to put through an attention call to Hongkong."

Huston moved out of the way, and Boyd took the seat by the radio. Di Bargi was busy with some calculations. Time after time Boyd sent out the personal attention call of Howard Fu-Zhse.

The United Mongolian Government answered, time after time, but the detective ignored the signals. After fifteen minutes, one of Fu-Zhse's secretaries responded,

but still Boyd ignored the responses. Finally Fu-Zhse himself responded. If he was nervous about the war he was starting, he did not betray it as he spoke impatiently over the ether.

"Who are you and why do you call?"

"Am I speaking to Howard Fu-Zhse, commander of the east?"

"Yes. Who are you and why do——"

"I am Burton Boyd, an American. I wish to tell you that your son has been abducted from his boarding-school at Budapest. You can quickly verify this by getting in touch with the officials of the school. This is to warn you that we are holding the boy as hostage. Unless you immediately recall every one of the attacking planes, he will be killed. You must also prevent the Europeans from making any hostile move. You have the power to do this, and you must act quickly. If you continue with your plans, you will lose your son. We can speak later of the terms upon which we will consider his release."

Fu-Zhse did not reply.

"Did Ecclestone take the boy?" asked Huston.

"Yes. The day before yesterday. The officials are frantic, but they haven't dared tell Fu-Zhse. All's fair in war. We won't have to carry out that threat, Bob."

"How do you know? A ruthless Oriental with the ambitions of Fu-Zhse might quite conceivably sacrifice his son and then be more determined than ever to conquer us and wipe out the nation in a hideous revenge."

"A ruthless and ambitious white person might. But, Bob, we are dealing with an Oriental, and we must consider the oriental, not the occidental, point of view. The most important thing in the world to Fu-Zhse is to have a son, a successor to carry on the glory of his name. You know that. If it was his daughter, he would sacrifice her readily. But a son, his only son, never. I think you understand how the eastern mind works yourself. The Cult of the Man-Child, we call it. One must have successors to honor one's memory. Fu-Zhse is ambitious, yes, but also he is proud."

"I hope you're right."

"I'm quite sure. I've had exhaustive psychological studies made of the Dictator, and the best analysts of America agree with me. By threatening the life of his son we can save, at least temporarily, the lives of thousands upon thousands of Americans and more thousands of perfectly decent Orientals carried on by the ambitions of their leader. Without the aid of United Mongolia, Europe will be wary of attacking America. A state of armed truce will exist, and it will continue indefinitely. They will not dare attack for fear of provoking us to kill the son, and we will not dare release him, for as soon as he is safe or dead, Fu-Zhse will attack. If we can hold off this war until Ecclestone has solved the coded notebook left by Harrison Ives, United America will have the tremendous advantage of atomic power, effective and under control. As our government has no desire to conquer more territory or to murder a few billion enemies, we will be able to force a real peace. If we had atomic power plans locked in federal vaults no nation would even consider war against us. The present move is to give Ecclestone time. He must penetrate that cipher."

"Does your decision to go to Venus still stand?"

"Yes. You understand my plans. Fu-Zhse's son is safely in charge of the government. You must stay here and manage the corporation. I'm going. When will the rocket leave, di Bargi?"

"Four hours from now will be the most advantageous time this year," said the professor, looking up from his calculations. "We are almost at Fort Severn. Last minute preparations are being made on board the rocket. Its secret has been kept remarkably well, though a few rumors have gotten out."

Below they saw the lights of the immense field at Fort Severn. The three-hundred-ton rocket was being slowly hauled out of the hangar by squads of powerful tractors. Its great wings, designed to support it while in the atmosphere, were being extended from the recesses into which they fitted when the rocket was out of the air. Preparation for the great adventure! The disclosing of United Utilities' secret. The *Interplanetarian,* would-be conqueror of the void of space. The consummation of the lifelong dreams of di Bargi.

A monoplane, black except for the white undersurfaces of the wings, flashed by. A short burst of explosive bullets came very near to di Bargi's plane, commanding attention. A harsh voice spoke over the radio, the receiver being on. "Permit me to board or I will shoot you down."

Di Bargi's plane was not armed, and it could not hope to outmaneuver the other. Boyd spoke into the speaking-tube to the pilot. "Let him board us," he said calmly. The plane slowed and stopped in midair, supported by helicopters. The monoplane took a position close above, to one side, and let down a rope ladder. Its controls were locked, and its helicopter propellers supported it firmly. A tall figure came down the rope ladder, holding a heavy pistol in one free hand. The rope ladder was very near to the cabin door. The figure motioned with the pistol and Boyd, obeying the gesture, opened the plane's door. Daringly the intruder swung to the open door and entered. Boyd spoke calmly.

"Mr. Lee Chilton, is it not?"

WHEN Fu-Zhse had heard Boyd's statement, he had immediately confirmed the fact that his son was missing from Budapest. Then, by coded radio, he had communicated with the triumvirate at Vienna, explained the situation, and demanded cessation of the preparations for the attack on America. The three, knowing that without Asia's help Europe would have little chance against America, called a halt in the mobilization of Europe. Fu-Zhse recalled his sixty thousand planes five minutes before they reached Hawaii, and sent messages to his secret staff in America to locate the place where his son was hidden. Beneath his calm exterior, Howard Fu-Zhse was humiliated and mad. He had been tricked, outwitted.

The sinister three at Vienna, the three from the unearthly nation of Cor, were angry also. At once they got in touch with the other Venerian, he who possessed the body of Lee Chilton, and exchanged code messages with him.

"Why did you turn over the corporation to us?"

"Was not that the plan? I thought you wanted control, to use the business to incite war."

"It was the plan. But we did not need the added influence of United Utilities to make war. We had enough money and political power already, and we were starting the war early. Didn't you receive our message yesterday?"

"No. It must be on the recorder."

"It is. We told you to keep the company, pretending loyalty to America. You could work with us secretly. The corporation has great influence and power. Now, neither of us has control of the company. Your gross carelessness in not reading the recorder and learning of our change in plans has cost us a great advantage."

"I am sorry. Can I atone?"

"Yes. The son of Fu-Zhse is in the power of America, and therefore our Asiatic allies refuse to carry out the attack. We cannot succeed unless he is rescued. His hiding-place is known to Burton Boyd, now in an airplane bound for Fort Severn, near Hudson Bay. Catch Boyd, and make him disclose the place."

"I have a very fast plane. I will atone for my fault."

SO it was that Huston and Boyd and di Bargi were faced by the tall man with the gun. He replied to the detective's question sourly. "Yes. You know I'm Lee Chilton. I will give you three minutes in which to tell me where the son of Fu-Zhse is hidden, or else I will kill you."

"If you kill me, what good will it do you?"

"I do not know. But it will do you even less good, Burton Boyd. I am waiting for your reply."

CHAPTER XVIII

The Jungles of Venus

THE three on the girder near the ceiling of the Council room of Cor looked down upon nearly two hundred people, most of them soldiers, and all of them enemies. One of the warriors hurled up a keen-edged sword. The weapon struck the box at the waist of Izanne, wrecking the delicate apparatus within. She lost her balance and fell into the closely packed mass of soldiers beneath. The voice of one of the Corian scientists rang out commandingly.

"Do not harm the girl! The fool who threw that sword should have a thousand lashes! She must live! But kill the men!"

Izanne had been stunned by the fall. Her body had struck the shoulders of a warrior and had knocked the man down, underneath the girl. She was not injured. Three of the soldiers carried her carefully up on the platform and placed her in a chair. The scores of other warriors who filled the great room were hurling swords at the two men still on the girder.

After ten seconds of dodging swords, Meriden the Sarvonian decided that he was in a place where he couldn't fight back conveniently. Without hesitation he jumped into the crowd below, bowling over two men and scrambling to his feet in two seconds. Then his great strength and his great skill combined to give him a few minutes of surprising victory. He was completely surrounded by crowding enemies, yet he was slashing and carving his way through the mass toward the girl on the platform. The recently acquired knowledge that Izanne was in reality an earthgirl did not lessen Meriden's love for her in the slightest. His mind and his muscles had a greater incentive than mere self-preservation.

The very crowdedness of his enemies hindered them and helped the giant swordsman. The Corians could not throw their swords, as it was almost a certainty that they would hit some of their comrades instead of the one lone Sarvonian. Meriden's reputation once again stood him in good stead; many of the closest Corians would rather let some one else actually oppose him while they stood around and gave their moral support. The exhibition of desperate bloody swordsmanship he was giving did not increase their eagerness to oppose him.

With a sword in each hand he was holding off three of his most pressing adversaries when a bearded Corian lunged for his back. Lee Chilton, though he was not a trained swordsman, did not hesitate a second. He jumped from the girder, where he had been momentarily forgotten, and his heavily shod feet struck the bearded one on the head and shoulder, felling him unconscious.

The lust for battle flowed through the veins of the earthman. He forgot the great superiority of the Corian forces. He placed his back against Meriden's for mutual protection, and furiously attacked the nearest enemies.

Lee Chilton was observant. In those few seconds he had stayed on the girder after Meriden had jumped, he had learned one thing; the Venerian technique of swordplay consisted mostly of slashing, not thrusting. The Venerians used the edges of their swords, not the points. The fencing he had learned at Yale served him well on the alien planet. The Corians were not prepared for his feints, his thrusts, his parrying, and it was in the very nature of Lee Chilton to take the offensive, to make his adversaries play his game, not theirs. They soon learned that the smaller companion of Meriden the giant was no slouch with the sword, either.

But the situation was ultimately hopeless. They might take a great toll, but very soon they would be overcome by mere numbers. Meriden redoubled his efforts to move toward the girl, gaining several feet. He and Lee were now near the heavy black screen that had been used in the demonstration before they were discovered, and the two comrades backed up against it, sensing a momentary advantage.

But the enemies were not all soldiers. One of the scientists saw the two from Sarvon and moved toward the projector to turn on the steel fatigue ray. Lee Chilton and Meriden were in its range; between the projector and the massive black insulating screen that prevented the ray from disintegrating the steel of the room. Lee saw the scientist's move and guessed his purpose. If the ray was turned on, thought Lee, his swords and those of Meriden would become brittle and fragile, useless, as had the sword which had been used in the demonstration they had witnessed, spying from the girder.

With swords disintegrated by the steel fatigue ray they would be utterly defenseless. Lee Chilton met brains with brains. As the scientist snapped the switch that turned on the projector, Lee hurled down the screen. Now the ray was not insulated; it would disintegrate part of the room and part of the immense structure of steel containing that room—the unified city-nation of Cor. So the Corian scientist was very prompt in snapping the ray off again. Lee Chilton and Meriden both engaged in battle with their crowding enemies, and their steel swords were sound, not fragile. They concluded that the ray had not been on long enough to affect the swords. It never occurred to either of them that there might be another explanation.

Meriden was very tired, but he was yet unwounded. Lee Chilton had acquired three trivial scratches. The men fought in silence; their enemies shouted, boasted, jeered at them, and encouraged one another. The surrounding circle became tighter, the fighting more severe, more purposeful. The roomful of warriors, scores of them, had been put to shame by two lone swordsmen. Lee Chilton knew that they could not hope to hold out many minutes longer.

IZANNE recovered and took in the situation just as Lee hurled over the black insulating screen. Before one of the Corians guarding her could clamp one of his heavy hands over her mouth, she had shouted in Sarvonian to her two companions:

"Fools! Don't try to rescue me! I will not be harmed. Escape to Sarvon. Tell them what we have learned. Quick! Through the wall!"

They realized suddenly that she was right. The earthgirl, who was called Izanne, was the only person in the universe who could solve the code of her dead brother, Harrison Ives. The coded notebook containing the secret of atomic power was on its way to Venus in a meteorocket sent from the earth by the three Corians in the bodies of the Dornns. At least, the Corians thought so. They could not afford to harm Laura Ives!

Meriden pushed the stud on the box strapped around his waist. Lee did the same for his box. The thrown sword that had knocked Izanne off the girder had demolished the box at her waist and the instrument inside it. This saved her life, but her means of escape were gone.

Chilton and the giant fought off the horrible nausea as the field of the machine's influence surrounded them. They were the masters of matter. They were not invisible, but intangible. After a few seconds in which they accustomed themselves to the mystifying reversal of light and darkness that accompanied the process, they walked *through* their recent adversaries, and out of the room *through* its solid wall of steel. The weapons which were thrown at them by the Corians while they were escaping, went through them harmlessly. They walked on through several rooms and several walls before they shut off the instruments, to throw pursuers (who could only follow by means of the corridors), off their trail.

They could not let their instruments function more than a few minutes at a time, for there was danger of complete dematerialization and death, so they made their astounding journey in short instalments, through any and all obstacles. The nausea and the flashing set of colors of the spectrum, that seemed to appear before their eyes each time they pressed or released the stud, became less severe as they became used to them. They soon reached the corridors of the city which were used for traffic, and mingled with the crowd of soldiers and civilians. Everywhere they noticed preparation for war —war with Sarvon as soon as the large steel-fatigue ray projector was prepared to wreck the immense single structure that was Sarvon. If its foundations were disintegrated, the entire city would collapse and Sarvon would be wiped out—Sarvon, friend of the earth. Meanwhile, as the Corians planned, the war, instigated by their efforts upon the earth, would decimate the rich Third Planet, and they could conquer and overrun it. Their three gigantic space-ships were nearing completion in a space outside the city-structure—a space cleared from the dense jungle.

Meriden's intimate knowledge of the city of his enemies helped the two adventurers to a great extent. They were not suspected or apprehended after they had finally reached the traffic corridors, which had been their first objective when they came to Cor. They passed unnoticed in the crowds, coming eventually to the highest level of the city, its immense roof-drome. There, after patient waiting, they seized a favorable opportunity and stole a plane, killing two of the occupants, who were about to start on a journey. The third escaped, made his way to a communication instrument, and informed the Council. The demonstration steel-fatigue ray projector was quickly mounted on a plane which set out in pursuit. The Council sat back to see the results of this practical test. The pilot of the pursuing plane kept in touch with the Council, and finally announced, over the radiophone circuit, that the steel engine of the plane containing the Sarvonians had been disintegrated, and that the plane had crashed in the dense jungle midway between Cor and Sarvon, near the range of mountains which was between the two cities. To return to Cor, the two men would have to penetrate mile after mile of swampy jungles, insufferably hot, thick with interwined vegetation, swarming with deadly reptiles, carnivores, and insects. That is, if they were alive. The Corian pilot said he did not know, that he dared not go down low enough to find out for certain. He had little fuel left. To go to Sarvon, they would have to surmount the tremendous mountain barrier and then penetrate even more dozens of miles of the jungles of the Hot Planet—a feat literally and unqualifiedly impossible, even for a superman like Meriden of Sarvon.

The Council breathed a sigh of relief simultaneously. The Councillors ceased to worry about Meriden. Their spokesman ordered that a fatigue-ray apparatus big enough to wreck Sarvon be immediately constructed and mounted on a giant plane. They had Izanne imprisoned under heavy guard to await the arrival of the meteorocket containing the notebook—the meaningless notebook that Ecclestone had faked when he had taken the real cipher document. The Councillors were blissfully innocent of the knowledge that they had been deceived —that the real secret of atomic power was in the hands of an earthman, even though that earthman himself couldn't read the cipher.

A number of hours later an interplanetary circuit was closed by some unfortunately curious earthman who was investigating one of the meteorockets sent from Venus, and the Corian meterologist Eenedar was transferred to earth to carry on his investigations of the earth's atmospheric conditions. The earth-identity in the body of Eenedar was imprisoned, but treated well.

FIVE hours after their plane crashed, Lee Chilton and Meriden had penetrated three hundred feet through the swampy forest. The insects were horrible, but as yet they had not seen any large animals. It was lucky, they agreed, that the fatigue ray that had wrecked their plane had not chanced to disintegrate their swords, for without keen swords to hack their way through the packed, tangled vegetation, they could never have come as far as they had. Sweat rolled off them in streams, their garments were torn and dirty, their bodies covered with muck. The only water they could find to drink was stagnant, sickening. Occasionally they could look up and find an opening in the foliage above them. Five

miles ahead they could occasionally glimpse the steep, almost vertical rock walls of the mountain barrier. If they could reach it, find some place to scale it—at least they would be free from the insects for a while. Then, on the other side, more than a hundred miles more of thick, forbidding, savage jungle. Lee estimated that a thousand feet a day would be the limit of their progress, unless they should happen to find a navigable water-course in the direction they wanted to go, and could make some sort of raft or boat, or unless some other lucky accident should happen to favor them. There was scant hope, but they did not despair. Barring a lucky accident, they could never reach Sarvon in time to warn the city of the steel fatigue ray.

"And even if we could," said Meriden bitterly, "there is no defense against it. Our scientists would not have time to devise any means of counteracting the ray. The city is built of steel. Even if they knew of the danger now, there would not be enough time to insulate the steel by a protective covering. Some of it perhaps, if they might know what could be used as the insulator, but the city is too immense to protect entirely. Sarvon's only chance would be to capture and destroy the projector—or better yet, to use it on Cor—and to capture and kill the scientists who know how to produce other projectors, and to capture and destroy all records and descriptions of the thing. All this would have to be done before the Corians had one chance to direct that ray at Sarvon." Profanity is not common on Venus, but Meriden gave vent to his feelings with an outburst of original invective that quite astounded Lee Chilton. The earthman was quiet. He knew that all the curses of two planets would not alter the situation, and he suddenly realized that he was thinking much more about Izanne than about the hypothetical fate of Sarvon.

Darkness was falling, and the jungle was awakening. The prowling flesh-eaters of the Hot Planet were faring forth from the lairs where they had slept out the day, bellies full. Lee recalled the great pack of jaguars he had seen from the plane that first night on Venus. Devoutly he wished that conditions on Venus were as astronomers had previously thought them to be—half the planet an arctic waste where night was eternal, and the other half eternally hot and always facing the sun. He wished particularly the feature of everlasting day—he was no coward, but he had the common sense to fear the jungle night.

He divided the time with Meriden so that each could sleep a little, while the other watched. They mounted a tree they had found that bore a fruit not unlike a pear, but extremely sweet. They ate their fill of the fruit and passed the night in the tree, one of them always awake.

They survived the night. The Venerian beasts of prey were quite capable of climbing trees, but the scent of man was new and unfamiliar to them and they were inclined to be wary. Good food could be had elsewhere, so they did not attack the strangers.

The next day the going was the merest trifle less hard, —they were able to go farther than they expected. Meriden had even found a sort of trail, though poorly defined, that some of the beasts used. It led to a spring of clear, cool water that the two men appreciated in spite of its small size. Refreshed and with the gummy mud and sweat washed from their bodies, they pushed on. When night approached again Lee estimated that they were almost an entire mile from the wreck of the plane; that much closer to the cliffs. They kept on going until the night was black. Then, ahead of them as they crossed a small, comparatively open space, they saw a snarling pack of jaguars.

The Venerian jaguar must not be confused with the terrestrial animal. On the Hot Planet, the great cats possessed the herd instinct that on earth is more generally, though not always—consider wolves, etc.—confined to the herbivores, such as horses and cattle. Though characteristically feline, the Venerian jaguar is not primarily a tree-climbing cat. And he is bigger by far than an African lion in his prime. His conformation and his markings—dark spots on yellowish-brown—are almost identical with those of his smaller cousin, the terrestrial jaguar.

The two men turned to flee, only to find more gleaming eyes directly in their path, more dim forms completely surrounding them. Meriden took one of his three swords—on each of which a jaguar's head was wrought in steel and gold—and lifted it to throw.

CHAPTER XIX

Into the Void

BURTON BOYD was not afraid of melodramatic threats, but something in the smouldering eyes of the man who opposed him convinced the detective that the intruder actually intended to kill him unless he disclosed the hiding place of Fu-Zhse's son. The oriental dictator had worked fast, thought Boyd. Already he had agents trying to locate his son. The thing that amazed Boyd was that Lee Chilton was an agent of Fu-Zhse. Boyd knew that something was wrong, but he could not account for or analyze the actions of Lee Chilton. Nor could Robert Huston. Huston had been acquainted with Lee before the cosmic transfer had taken place, and the identity now occupying Lee's body was so utterly different that the vice-president had formed the opinion that Lee Chilton was demented, a monomaniac, since his uncle's death. But Boyd, his mind more accustomed to judging men, was instinctively doubtful of this assumption.

As the intruder had entered the cabin of the hovering plane he had covered Huston and Boyd with his gun. He had paid scant attention to di Bargi, who had finished his calculations and was trembling in his seat. Di Bargi was a man of science and a man of peace, not a fighter or adventurer.

But the professor was no physical weakling, and his brain was always active. Far below, on the field of Fort Severn, was the immense Interplanetarian, the achievement of his life, the culmination of his years of untiring work. This stranger, thought the professor, is likely and capable of killing us all, whether or not he learns what he desires.

The man with the gun greatly underestimated the scientist. Di Bargi was trembling with fear—but it was not physical fear. If di Bargi has been a coward he would never have planned to jump off the earth in a transvoidal rocket. He feared that at the last minute he would be deprived of the glorious adventure, the achievement that would place his name indelibly among the great men of history. He had worked a lifetime, spent a fortune, with one end in view, and now, at the last

minute, he saw the possibility that after all he might be deprived of his great achievement.

Di Bargi acted. First, with his brain. He was near the speaking tube to the pilot's compartment. Silently he edged toward it in his seat, took it in his hand, and brought it close to his lips. With infinite care he whispered, while the intruder was threatening Boyd, to the pilot. "Bank suddenly to your left, and dive for a thousand feet."

The pilot heard the whisper and understood. Suddenly the hovering plane tilted violently and shot downward. Boyd, Huston, and the intruder were jerked off their feet, but di Bargi was prepared for the shock. The second the plane lurched he leaped for the one who was called Lee Chilton. He had seized the gun and twisted it out of his adversary's hand. He used it to beat the man unconscious as the plane dived. When it leveled out the unknown Corian in the body of Lee Chilton was quite harmless and had a cracked skull. Boyd and Huston were shaken up, but totally unharmed. Di Bargi was exuberant. Above them the intruder's empty plane was still hovering motionless in the air, controls locked. Below them the tractors were still hauling the immense space-flyer from the hangar where it had been hidden from the world, thanks to the clever work of Benny Jacobs.

They descended to the airport, turned over their prisoner to the police, who sent two men up in a plane so that one of them could board and bring down the empty, hovering plane.

Last minute preparations were being made on the rocket. The immense, efficient motors that were to propel the rocket while it was in the atmosphere were being inspected and tuned. The last of the thousand and one different kinds of supplies and provisions were being stored within. The last of the liquid hydrogen units had been installed hours previously.

"Why the motors?" asked Boyd of di Bargi, "Couldn't you have used the rockets entirely? Rocket-airplanes can start from the ground. I'd think the addition of motors almost useless."

"The answer is maneuverability. We want to be able to explore Venus after we get there, to go wherever we want. I also have several small planes, dismantled, on board."

DI BARGI went on to explain in detail the principle of space navigation by the reaction produced by the explosion of a rocket. He pointed out some of the salient features of the ship's construction. "The entire outer shell is double. A vacuum protects us not only from the cold of interplanetary space but from the intense heat of the sun also. A fine astronomical observatory occupies the first division of the rocket, at its very nose. Immediately behind is the control room, from which the *Interplanetarian* is guided both while in the atmosphere and while out of it. A duplicate set of controls is provided so that it may be flown from the observatory room. Periscopes and telescopes arranged according to the principle established by Harrison Ives give the pilot ample vision, however, from the control room proper. Behind it is the combination dining and recreation room; behind *it* the quarters, and still farther back the kitchen, placed so as to be near to the food supplies, which are behind it. Then come hundreds of kinds of other supplies, such as cigarettes, airplanes, games of various sorts to pass away any idle hours, books, microscopes and scientific instruments, portable shelters and collapsible boats, powerful machine guns and explosive bullets—everything for the preservation, amusement, protection, and benefit of the voyagers.

"Behind these are the liquid hydrogen and oxygen and the electrical devices for exploding various quantities of them when desired. As each unit is exhausted, its section of the rocket will be automatically dropped off by a very small explosion from the next unit. Thus each successive unit will have a smaller rocket to propel, and can therefore propel it farther.

"At the start, due to the horrible acceleration we shall need to overcome gravity, we shall have to endure great pressure, perhaps enough to render every man aboard unconscious, so we have devised a very complex robot, almost a thinking machine, built strongly enough to function correctly under pressure three times as great as we are expecting. The machine will control and direct the ship until we regain consciousness. If the rocket fails to develop precisely enough speed to leave the earth, or if it should get out of its proper course, or if any other irregularity occurs, it would be detected by some one of our instruments, operating an electric relay and causing our robot to remedy the defect by increasing the explosions or by taking whatever other action may be necessary.

"Out in space, free from the earth's influence, we should tend to float around in the inside of the rocket in an inconvenient manner—that is, while our speed is constant. If we accelerate positively or negatively, the acceleration will reproduce the effective of gravity.

"The floors of the rooms are steel, however, and if one is doing some work and is handicapped by his tendency to float around the interior of the rocket at the slightest push, one can turn on the electromagnets in his shoes, operated by small compact batteries in his pockets, and one can stay put wherever he wants to be." Di Bargi smiled whimsically. "We shall all be very sick," he predicted, "when our bodies are freed from gravity. Space-sickness, due mainly to the releasing from gravity of the liquid within the three semicircular canals of the inner ear—the human organ of balance—will be a new sensation, and I doubt if it will be pleasant. We'll perhaps become accustomed to it in time."

"I suppose," said Burton Boyd, "that the earth and Venus are approaching inferior conjunction? You intend to take the shortest route across the void?"

"No. Inferior conjunction will not occur until slightly more than a month from now, yet we are leaving immediately. The object is to arrive on Venus before inferior conjunction, so that if conditions of atmosphere, etc., are inimical, if we should not be able to exist there indefinitely after all, we can take the shortest way home. The return trip is the more doubtful of the two, so I want to make the return at inferior conjunction. We can afford to go farther on the outward trip in order to save millions of miles should we be forced to return immediately. Even now, we do not absolutely know how conditions are on Venus."

"What *is* absolutely known at present?"

"That's hard to say, right now. In 2177, using the new hypertelescope, I upset many of the commonly accepted theories about the planet. I established definitely that it did not always keep the same side toward the

sun as astronomers believed in the twentieth century, but that it actually revolved on its axis, with a day almost identical in length with our own. I saw enormous structures and even identified airplanes in its atmosphere during that period when its cloud-blanket, which is almost always present, was temporarily lifted. My remarkable photographs proved my contentions.

"Of course, it is very hot. Also very wet. The conditions of gravity must be quite similar to those on the earth, but you will find that you will weigh a little less and be able to jump a little higher. As far as we can definitely tell, you will be able to breathe the foreign atmosphere without bad effects. Of course, we shall see; but I think you may accept what I've told you as facts."*

Less than four hours later the doors were sealed, the motors roared into action, the immense craft took off smoothly, and smoothly did the trusted pilot take the rocket as high as its combustion motors would carry it. Its ceiling was even higher than di Bargi had calculated, and the professor was elated.

In Cabin R were Burton Boyd and the four members of Benny Jacobs' news-unit. Young, likable, noisy, clean-cut fellows they were, proud of the tremendous scoop that was theirs, and eager for adventure. "We're ready, Mr. Boyd. Shoot, fellows."

The technician of the gang was at the controls of the radiovision unit. The announcer had his mike in his hand. The visorman was focusing his lens for an interior shot. Benny Jacobs hovered around, directing the gang efficiently. Six minutes after the take-off they were ready—Boyd nodded, releasing them from their promise of secrecy. It was time to let the world know that after all the Venus-rocket had not been destroyed.

The technician, alert, flipped the necessary switches and twirled his controls. In ten seconds they were connected with the main office of the Universal News Company, who in turn relayed their speech and images to the thousands of radio-television units in the world. The news was spread while it was being made.

THE announcer, a being blessed with the gift of spontaneous loquacity, made the most of the situation.

"Ladies and gentlemen of the world. This is News-Unit Thirteen of the Universal News Corporation, speaking from Cabin R of the *Interplanetarian,* the first passenger carrying vehicle to venture into extraterrestrial space. The rocket was not destroyed by the explosion of the liquid hydrogen factory, as was broadcast several months ago. Universal, of course, is pledged to strict honesty in the presentation of news events, but on this exceptional occasion we greatly exaggerated the damage done by the explosion in order to make the criminal, who was undoubtedly listening in, believe that his plan was successful. We apologize to our public for this justified deception.

"We are now in the earth's atmosphere. The television views we present now show in detail the interior of this cabin with our elaborate furnishings. Everything is fastened down. Our remote-control televisor—" (click-click-snap-buzzzzz from the technician's control board,) "—will show you the landscape as seen from the rocket now. The large body of water is Hudson Bay. We are approaching the ceiling of the rocket, that is, with the internal-combustion motors. In a short while we will begin to use the terrific energy of exploded liquid hydrogen to lift us beyond gravity.

"We have made arrangements so that our visors and mikes will be cut off the regular transmitter as soon as we leave the earth, and automatically hooked up to a transmittter capable of sending voice and pictures across the void. News-Unit Thirteen will be in constant communication with the earth, serving you as Universal has always served the public. We will now cut in on the mike of Professor di Bargi and ask him to say a few words from the control-room."

Click-snap. BUZZzzzzz . . .

"I am very busy at present, and will have no time to explain the rocket. In a few minutes I will press the alarm signal, so that everyone on board will tie himself in a very strong hammock. The acceleration will probably render everyone aboard unconscious. I have just rechecked for the last time the exceedingly strongly constructed robot that will handle the controls while we are unconscious."

Click!

"Our interior televisor now shows one of the hammocks which will be used as Professor di Bargi has just told you. We want to show the public as many interesting details as possible about our life aboard the rocket. You notice the strong supports for the hammocks. If we tied ourselves in solid chairs, for example, we might be crushed against them. The elastic hammocks will give under the pressure, and minimize the danger. If we have time, we will also show you a view of our air-purifying apparatus before—"

BRRRRRRRRRNNNNNGG!

"You have just heard the alarm signal. We must tie ourselves in the hammocks at once. While we leave the earth, of course, no announcements can come through to you, but we shall leave the remote-control televisor on, and we hope you will be able to see the earth dropping away from the rocket."

Click-click-snap. Click.

Below, in United Utilities' Hudson Bay office, Robert Huston was listening to the news report, and watching the receiving screen of the news-machine. Without moving from his seat he could see the searchlights outside that were trained upon the great ship. He went to the window and looked up in time to see a brilliant blue flash at the rocket's tail. Another. Three more. The rocket was moving fast now, very fast. Five more flashes, and then a steady stream of blue flame. In a few seconds it

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NOTE.—*I owe the reader both an explanation and an apology, yet it is with some hesitation that I give them. What I have to say is difficult to understand, and I do not want to be called a fool for saying it. I ask the reader to keep a scientifically open mind.

There is no such thing as *time.* This narrative is not a fantastic prediction, but a cold record of interesting facts and events, pieced together and reconstructed from the accounts of such persons who survived them. These events took place, or will take place, as you prefer—in the year 2180 A. D.

Time—like the three dimensions of space—is a conception of the mind, enabling it to understand and correlate events, in the same manner as the dimensions of space enable the mind to understand size and position.

I am associated with certain scientists who, in the first months of the year 1930 succeeded in penetrating time—the fourth dimension—and actually traveling through it in the same manner as we can travel through space. They started their researches several years ago, using Einstein's theories as the bare foundations of their work. They are not yet quite ready to disclose their experiments to the world, but such disclosures will undoubtedly be made when all the evidence is prepared and collected to enable them to prove their assertions. This may quite possibly be before the end of the present year. In the meantime, in return for some small aid I have given them, they have given me this chapter in the history of two worlds. It is true. I would not make such a statement unless I was confident that I could prove it within a year or so, to the satisfaction of any scientist or any doubter. I have merely revised the history, humanized it as much as is consistent with the truth, and presented it in narrative form.

At present it is thought that Venus always presents one side to the sun—that it is half arctic waste upon which the sun never shines, and that the rest is a fiery desert. I will not argue with authoritative astronomers—yet. Di Bargi's statements, as quoted, are nearer correct. Venus does revolve on its axis.

C. C.

had dwindled to nothing, disappeared. Burton Boyd was on his way to Venus. Huston was home, with a terrific war threatening. Bob Huston shook off the thought of war and returned to the instrument, staring at the clear, sharp picture it presented of the earth falling away rapidly. The convexity of the pictured scene was apparent. The earth dwindled until all of it could be seen on the screen. A globe, with the outlines of the continents upon it.

Click! The picture vanished. A voice came through the loud speaker. "This is the main office of Universal News. We are now out of communication with News-Unit Thirteen. As soon as a further message comes through, we will broadcast the words and pictures to all the world. The public will notice that again Universal is the first to present a news event of exceptional importance; again we lead the field. Through Universal you will be placed at the receiving end of the first interplanetary television circuit. Universal is always the first—"

Robert Huston snapped off the news-machine, left the office, and made his way toward the UU-7. The big quintimotored monoplane was soon roaring southward to New York.

CHAPTER XX

Tension

IF it is true that "it takes six scars to make a man," Meriden could have qualified as a male quartet by a safe margin; yet in all his battle-filled life he had never been so close to death as he was when he hurled his sword at the nearest of the surrounding pack of jaguars, and the Swordsman of Sarvon knew it. Lee Chilton knew it too. He had looked death in the face more than once, and he had laughed. Now, he didn't laugh. Danger had lost its allure; life had become precious to him since he had met the lovely Izanne. Lee Chilton wanted to live. Meriden had the same desire, and the same dark-eyed girl was enshrined in the heart of the Venerian warrior.

It was vain to spend time regretting that the devices Izanne had given them had been wrecked utterly by the crash of the plane. They could not dematerialize and walk through the snarling cats; they had nothing with which to defend themselves except their muscles and their swords and that thing that mortals, knowing no better, call Fate.

Meriden's hurled sword made a clean kill, cleaving the animal's skull. With Lee at his side, the swordsman leaped toward the slain beast and seized the sword while the jaguar was still writhing in its short death agony. Precious, that sword! For a fraction of a split second not one of the pack of carnivores moved, and in that instant Lee Chilton, trying to follow Meriden's example, hurled one of his swords with all the strength in his Venerian body. He failed; the heavy sword did not touch the tawny beast he had thrown it at. He was not a warrior of Venus, trained from infancy to throw the double-edged blades.

His action goaded the flesh-eaters into action. With one accord they charged the two who stood in the clearing, in almost total darkness. The great cats did not need light. The jaguar-pack hunted at night.

It seemed to Lee Chilton that above the roaring, snarling screams of the charging jaguars, a higher scream was heard, and then a crash. Light flooded the universe for a brief second, and then there was nothingness. He was falling through an eternity of blackness—and even that sensation faded, leaving only a dim semiconsciousness of infinite pain—

XAVIAN, supreme ruler of Sarvon, was worried, far more than appeared on his earnest intellectual countenance, as he spoke with his advisors.

"In three or four more days the army will be ready for the attack, and we have no leader. Nothing has been heard from Meriden since he left to spy on the new weapon of the Corian scientists. The only thing that influenced me to let him undertake the journey at this important time was his intimate knowledge of Cor. Now, if he has been captured or killed, our army is without its leader. The soldiers adore that giant champion. He is worth thousands of men, on the battlefield. And we have no word from him concerning the nature of the weapon with which Cor intends to wipe us out. We are unprepared to withstand their surprise. The loss of Meriden is serious indeed; to say nothing of the Earthman, Lee Chilton, and the foolish girl who followed them there."

"We have some new weapons too," said Grantolon, the scientist. "The Earthman Albert Dornn and his brothers, who are living now in Venerian bodies in our city-nation, have acquainted the scientists of Sarvon with the principles of terrestrial fire-weapons—guns, rifles, revolvers, are the strange words they usé to signify these weapons. In a few days we will be able to supply the army with fire-arms, and then perhaps the battle will not be so unequal. Our new weapons will give us a certain advantage, though their use requires skill attainable only by practice. We have been having some difficulty with what are called 'sights' in the English earth-language. Albert Dornn was familiar only with the sighting adjustments for weapons on earth. On our planet the gravity is slightly different, and we had to calculate for the necessary corrections."

Albert Dornn spoke in the Sarvonian tongue. "I am not by nature a militaristic person, but weapons were my hobby on the earth. I am disclosing the information I possess to the scientists of your city-nation, because you are making war on Cor to prevent that nation from invading my earth. I thank Grantolon for his assistance."

THE main office of Universal News, in New York City, was usually a bedlam, but an organized and methodical one. There was the gigantic clearing house, where the radiovision images from the television units all over the country were received, canned permanently, and at the same time relayed to the hundreds of thousands of subscribers to Universal News, who saw news as it happened, or else had the words and pictures preserved for them until they had leisure to learn of the happenings all over the world.

A visitor entered the office of the general manager. "I represent the Eurasian News-Syndicate," said the stranger. "Your company and the various associated companies I represent serve practically the entire world with radio and television news. We are losing prestige and business because we were not on the inside about the United Utilities rocket, as you were. The public is tremendously interested, as you know very well, in this attempt at interplanetary travel, both from the scientific and the human-interest and achievement points of view.

Therefore I have been instructed to make negotiations for the syndication of this news, if your price is at all reasonable. Combined, Universal and the Eurasian Syndicate will cover the entire world, keeping everyone informed up to the minute."

The general manager reflected for a brief moment, and then made his decision. He was paid to make decisions. "We have cooperated many times before with your syndicate, and I have no objection to cooperation this time, at the usual fee of $10,000 per minute of television images, *plus* a charge of $50,000 to partially reimburse us for the great expense of developing the interplanetary television transmitter under the direction of Professor di Bargi. Ordinary radio waves will not cross the void."

"I have here a certified check for half a million. We can proceed at once to sign the contract—"

The manager took his desk-phone and gave a few rapid orders. "In thirty seconds your main office will be connected with this office, and when, as, and if any further messages from the rocket come through, you may distribute them to your public. If none come through, your deposit will be refunded, except the fixed fee of fifty thousand."

"Thanks. My employers expected you to be very difficult to deal with. You have an ironclad scoop. It's impossible for us to send a unit where your Unit Thirteen is. We appreciate your cooperation greatly—"

"That's all right. We're not trying to gyp you for all we can get. There is another thing to be considered however. This strained truce that America has forced on Fu-Zhse is not liable to last long. The only thing that is keeping America out of war with Europe and Asia, the territory served by your syndicate, is Fu-Zhse's love for his son. Europe does not attack without the aid of the Mongolian; we are staving off the actual war, but secret preparations are being made for the inevitable hour when war will come. Our country's bureau of Psychological Intelligence certainly analyzed Fu-Zhse correctly. Nothing else in the world could have stopped him for a minute. The point is this: War is coming sooner or later, and war will automatically prevent Universal from cooperating with any Eurasian news company."

"My employers understand that perfectly. At present, however, there is a technical peace, although strained, and we are using the opportunity to obtain the news our public is demanding, before they throw us down. The best we could do previously was to broadcast views from observatories that had the rocket under observation."

"We're doing that now, as nothing is coming through from the rocket. The astronomers report that the rocket is proceeding to Venus, and has been observed to deliberately alter its course several times, showing that intelligence is directing it, and we expect to hear from Benny Jacobs at any minute."

"I see. Well, that finishes my business here. I won't take up any more of your valuable—"

"Your employers understand that in case of war we will disconnect them immediately?"

"Yes. As a matter of fact, in case of war I will be out of a job. I'm an American and proud of it, though I represent a foreign organization that has prestige and a long record of service."

"Let's hope that damned hell won't come for a long time yet. It will take the scientific militarists about three days to wipe out ninety-five percent of the world's population, and the rest will die from the stench."

"You're right. I'll be leaving now. It's been a pleasure to deal with your company. Between the two organizations, we can cover the world with Benny Jacobs' television images and radio announcements as soon as they come through. The whole world will be listening in."

THE Council of Nine was meeting in the city-nation of Cor, planet Venus, and the Spokesman was doing the talking.

"The first of our space-ships will be done in time to take advantage of the inferior conjunction of the two planets. When Earth and Venus are at their nearest approach, approximately one-third of our population will then embark—the first wave of our invasion of the earth. But it is absolutely necessary that we utterly destroy Sarvon before we try to cross the gap. With only two-thirds of our population here, Sarvon could easily overwhelm this city. We have realized all along that unless Sarvon is wiped out, we can not hope to be successful in our conquests.

"Furthermore, Council of Nine, we cannot hope to conquer the earth in its present state. The noble three we sent to the Earth-city of Vienna, occupying the bodies of the three brothers Dornn, who, in the Corian bodies of the nobles, are now safe in Sarvon—the noble three told us over the ether what was impending on earth. With their terrible engines of destruction, it would take a very few days for the terrestrials to wipe each other out, literally. We could easily conquer the remnants, shattered, disorganized, lacking men and in no condition to withstand us.

"But the later messages from the three in Vienna tell of a truce. The world is armed and waiting. If we should appear now, they would forget their own planetary disorders and turn at once to join against us. We should have no chance. Our only hope is that this truce can be broken up before the inferior conjunction. If it is not, we shall have to wait more than a year* until the next inferior conjunction occurs, because our space-flyers are only planned to make the journey when the two planets are at their closest approach. At any other time the voyage would be extremely hazardous. But if we wait too long, the world is liable to have recovered from the effects of its war, partially at least, and we should not have so great a chance of success. Therefore I sent a message to the three in Vienna showing them the paramount importance of inciting war at once, so that we can strike when the majority of the terrestrials have wiped each other out. I have also ordered the scientists in charge to rush construction of the monster projector of the steel-fatigue ray, with which we will wreck the steel city of Sarvon and crumble it to dust. The tests of the ray shows that it disintegrates steel in a second. The projector has a range of several miles—we can go high enough above the city in the giant plane carrying the projector so that there will be no danger of our being discovered, in the night, by the Sarvonians. The ray is invisible, and also invincible. They will never know what happened. The city will fall and the jungle will cover it, and we shall be free to devote our attention to the rich planet. The rich planet—"

The Spokeman paused. One of the younger members of the Council spoke. "What of Eenedar's plan?"

"I do not know what it is," replied the Spokesman,

* That is, a Venus-year—224.7 days.

"but Eenedar is a scientist of the first class, the most distinguished meteorologist and atmosphere-expert that Venus has ever seen. We transferred him to the body of an earthman so that he could investigate the condition of the earth's atmosphere. He had some plan in connection with our conquest, but he did not wish to disclose it until he was sure of the correctness of his theory. The earthman in his body is still imprisoned—whenever Eenedar wants to return there is nothing, so far as we know, to prevent him, but we have not heard anything from him."

"How about the meteorocket that the Three at Vienna sent here, containing the secret of atomic power?"

"Our astronomers were on the watch for it. Several of the observatories got good photographs of the luminous streak it made when it fell, and from the accurate pictures we at once calculated its exact location, determining the spot by triangulation. These small rockets we use are constructed to explode when they reach a certain depth in the atmosphere, releasing unharmed whatever is inside them, and a parachute that lets down the cargo to the ground. The detachment of men we sent to find it has not yet returned, or even sent us a message, but they will find it soon. The girl is carefully guarded—she will not escape us this time. She is the only one who can solve the code of her brother. We will make her reveal the secret of the book to us, and then we shall have yet another weapon."

THE earth-girl Laura Ives, sister of Harrison Ives and a scientist in her own right, paced her narrow cell impatiently, waiting, waiting. She knew that the greatest scientific achievement of her brother, martyred genius of the earth, was being sent to Venus so that the Corians could force her to reveal the secret of Harrison Ives' intricate code. She had heard that the greatest experts of the world had been hired by the Three in Vienna and that they had not read the secret of the notebook. She knew that when the Corians got it, they would resort to every form of torture, if necessary, to force the key of the cipher from her, and she was afraid, afraid that the pain would make her yield, and furnish the enemies of her world with a weapon with which to destroy it.

She thought of her brother, shy, retiring, but possessing the greatest mind the earth had produced in centuries, and she thought of the Venerian girl who had taken her own body from her and had killed the brother she loved. She brooded over the possible fate of Meriden the Sarvonian and the earthman Lee Chilton, and who shall say which one was uppermost in her mind—or in her heart?

She planned escape. She had escaped once before. The Corians seemed to be ignorant of, or to underestimate the supernormal strength that was the possession of all who had crossed the void and entered an alien body. The machine that made possible the transfers had peculiar effects upon certain nerve and brain centers of the two individuals whose identities were interchanged. She could easily have torn the steel bars from their sockets. She had done so the previous time she had been imprisoned. But now there were dozens of armed guards outside. An attempt to escape would be unsuccessful, she judged, and would only reveal her great strength, with the result that the cell would be strengthened. She hoped always for some let-up in the vigilance that always kept scores of men in the corridors outside. At least, she thought, they were decent enough to give her good food and clean clothing, and to allow her a degree of privacy.

But not for a minute were the many alert guards absent from the corridors. She could break through the bars; but unarmed, it was hopeless to expect to get past the warriors.

IN Vienna, the three who had the bodies of the Dornns were holding a conference. Their tones were quiet, but in each of the alien minds was suppressed excitement and unsuppressed hate.

"You warned Venus of the terrestrial rocket-ship?"

"Yes, just now. They will be prepared for it, should the secret operative we managed to get aboard at the last minute when we learned that the rocket hadn't been destroyed months ago be unsuccessful in carrying out our orders to kill everyone aboard and take the ship on to Venus. As no further messages have come to the newssyndicates from the newsmen on board, it is possible that the Corian who got aboard has already killed the earthmen and is in control of the ship. This will greatly aid Cor. Only one of the three ships being built on Venus can be completed in time to take advantage of the conjunction occurring within a month. By using the earth-built rocket, twice as many of our countrymen can come in the first invasion. They have probably already subdued Sarvon."

"But," protested another of the three, "the recent messages from Cor stress the necessity of our breaking up this truce. Even if we could count for certain on twice as many Corians in the first invasion, we are no match for the earth."

"True. We ran into bad fortune because we did not know enough of the psychology of the various races of terrestrials. To an Oriental, it is a curse and a disgrace to be without successors. By abducting the son of Dictator Fu-Zhse and holding him as hostage, the American government succeeded, in the only manner possible, in keeping Fu-Zhse from overrunning the western hemisphere. Our agents, however, are on the trail of the kidnaped boy.

"You know the orders I have given them?"

"No. What are the orders?"

"As soon as they locate him, they are to kill the boy. America has promised to let him live as long as Fu-Zhse refrains from war. As soon as he is killed, we will inform the Dictator of that fact; you may be sure America won't! Fu-Zhse will believe as I want him to believe, that America broke her word and executed the boy. Then the yellow horde will descend upon America. The two halves of the world will battle to death. The war will be short. The earth scientists can wipe out nations in a day. Those who are left, if any are, will not be able to oppose the hordes from Cor. Nobles, we are on the verge of success!"

"Success. We are conquering a world. What is that phrase the soldiers use? We come and we kill, or something like that."

"Yo maku e yo pento!"

END OF PART II

Suicide Durkee's Last Ride

By Neil R. Jones

(*Continued from page* 547)

"For me?" queried Brady in surprise and rising anger.

"Yes, you! Believe it or not! Come here and I'll show you something!"

Mystified, Brady followed Smith back into the control booth of the *Silver Bullet*.

"I see you've got your window down," observed Smith.

"Plenty of fresh air—that's fine."

"Say, what's your game, anyway?" inquired Brady a bit truculently.

"Look up there!" directed Smith, pointing across from the operators' stand to a building which towered several stories higher than the one in which they stood. "Do you see that open window on the fouth floor?"

Brady looked.

"Anyone sitting here at the control board of the *Silver Bullet* would make a nice target for a sniper up there," spoke Smith significantly. "His auto would run wild if somebody should suddenly bump him off."

Brady paled.

"It's a great racket, Brady, if you string along with the main crowd. You had your chance, and you tossed it aside."

"But—but—" The cowed race car owner commenced to expostulate, but he was cut short by the racketeer.

"I know what you're going to say! You think Cardigan is in on it! Well, he doesn't know any more about it than you did before I told you!" snapped Smith. "You won't dare to let out a peep about me, and if you did, there's nothing to prove! Besides, I know all about your rotten scheme to fix the *Mystery!* It didn't work did it? Suicide Durkee came through with the goods!"

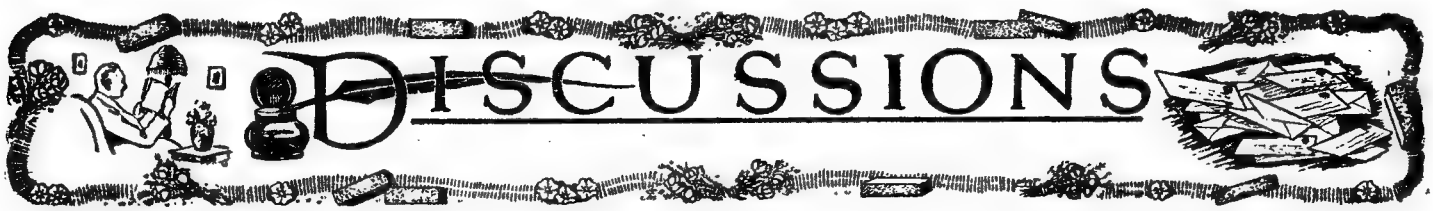
Brady was frozen to silence.

"If your car had looked like a winner in those last three laps, Brady, there'd been a murder in this building!"

Brady sat quiet in his chair, casting frightened eyes furtively about as he contemplated what might have been.

"And I still maintain," remarked Smith meaningly as he walked out the door, leaving the beaten rocketmobile racer in his control room, "that it was a good thing for you that your car didn't win!"

THE END



In this department we shall discuss, every month, topics of interest to readers. The editors invite correspondence on all subjects directly or indirectly related to the stories appearing in this magazine. In case a special personal answer is required, a nominal fee of 25c to cover time and postage is required.

AN ENGLISHMAN COMES TO THE DEFENSE OF DR. SMITH

Editor, AMAZING STORIES:

For five long years I have been a reader of your magazine, and as a whole, I find very little to complain of.

For five long years I have read the comments and criticisms of the readers that are printed in the "Discussions" columns. Thus far I have been content to absorb the opinions of other readers without myself attempting to contribute to "Discussions" Columns. That is, until this verbal duel between Miss Olive Robb and Dr. Edward E. Smith began. I notice that the battle is progressing very nicely.

Dr. Smith can, and will, no doubt defend himself very well without my feeble aid. He has, thus far, done nobly; more power to him. But it so happens that Dr. Smith is my favorite author, and when someone launches such an attack upon him as did Miss Robb, for the sake of a few slang phrases, why, then it "hits me right where I live."

It has been said that "The pen is mightier than the sword." Be that as it may. I would defend Dr. Smith if I had to do it with a fly swatter. He has afforded me quite a few hours of real entertainment and anyone who can do that deserves some consideration. I now place myself in fencing position. "On guard, Miss Robb! Begin!"

First, it may interest Miss Robb to know that I myself am a full blooded Englishman (having been born in this country, thank the lord) meaning no offense to Miss Robb, or to England—I simply don't like the country. However, all this is of no importance.

What "pulls my cork" is the series of vicious thrusts that are directed at Dr. Smith, who is placed at a disadvantage because the deliverer of those thrusts is a woman.

Slang is, in my opinion, an abbreviated, and compact form of English adopted by the American people because of its convenience. I know quite a few men, doctors, lawyers, musical instructors, and even an instructor of Physics, who all indulge extensively in slang. These same men are all well thought of and highly respected.

Miss Robb may say it is a different matter to use slang in ordinary conversation than to use it in the printed form, open to the public gaze. Is it? Why should it be? How many of the average Americans are familiar with the stilted book-English and the six syllable words that most writers indulge in? It is an effort for them to read the works of such writers. They do not read fiction for lessons in grammar, but for amusement.

Dr. Smith's portrayal of his characters in the "Skylark" series was very life-like. Dick Seaton was a true to life character as he flashed across the pages at increasing acceleration.

He was a "blinding flash" and a "deafening report."

It is my humble opinion that slang was quite appropriate for Seaton. If he had been depicted as any other type than the careless speaking, impulsive, good natured chemist, the story would have been spoiled.

The trouble with England today is that the Englishman is too self-conscious and artificial when in contact with the public. He doesn't act natural. I know because I am an Englishman and I know other Englishmen who are like myself in this respect. They are proud and inclined to crawl into a shell, so to speak, when among strangers.

Having delivered what I consider (?) a mortal thrust, I shall sheath my sword (I mean pen) and withdraw from the field of conflict. If the enemy considers my attack weak and feels that my final thrust failed to strike home, I can only repeat that I am an Englishman and don't know when I'm beaten and that if I didn't get a square meal, I at least got a lunch, I'll bet a hat."

C. E. Tickele,
1453 E. Wood Street,
Decatur, Illinois.

(It is certainly a comfort to have a reader of five years standing like us so well as this contributor seems to do. Miss Robb, in what may be called her exciting letters, certainly stirred up a lot of comment. It is quite amusing to see how the correspondents turn upon her and we are most curious, as many of our readers must be, to see if we will get an answer from the lady. We thought Dr. Smith, in his good humored way, put up an excellent front and defended himself very nicely. All nations have their slang and it is quite natural that full-fledged American slang should affect an English reader rather disastrously. In the slang way, the English have plenty to answer for. An interesting feature of this letter defending Dr. Smith's very American story is written by one who calls himself a full blooded Englishman. This makes him a particularly good ally for Dr. Smith. The typical Englishman is absolutely different from the Scotch and Irish. He does not want to talk to anybody without some excuse for an introduction. It is almost comical, the impression it makes upon an easy going American to realize the unnecessary reserve of the English cousins, as they call themselves. We hope that it won't be long now, before we get another story from Dr. Smith—slang and all EDITOR.)

(*Continued on page* 570)

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In the Realm of Books

A New Novel by Merritt

"The Dwellers in the Mirage," by A. Merritt. Published by Liveright, Inc., 31 West 47th Street, New York. 294 pages. $2.00.

LEIF LANGDON of Viking ancestry and Jim Two Eagles, a Cherokee Indian educated in a Western College, are exploring the unknown Endicott Range in Alaska. One night they hear the echo of a far away anvil stroke, which prompts Leif to tell Jim of the aim and purpose of their trip.

Several years ago Leif had accompanied a scientific expedition into the Gobi desert, where he had met with the Uighurs, blonde huge savages, presumably the prehistoric ancestors of the Vikings and Norsemen. Since he was blonde and huge and bore a close resemblance to a legendary hero who disappeared ages ago, he was hailed as "Dwayann" the liberator who will lead the Uighurs back to their place among the nations. The very fact that he wears a ring showing the picture of "Khalk'ru," the mythical Norse Kracken and also certain blood tests conducted by the priesthood seem to show conclusively that he is their long lost leader. He learns the language of the Uighurs with unreasonable facility.

They install him as leader or chief priest and the entire ritual connected with the worship of "Khalk'ru" is to Leif like something forgotten, but easily remembered.

He is tricked into directing the sacrifice of a beautiful nude girl to "Khalk'ru," the chief malignant spirit, the god of evil of the "Uighurs," and in spiritual revolt he decides to leave.

Much to his surprise they let him go, but the priests tell him that whenever "Khalk'ru" calls he must answer that call.

While chief priest of the "Uighurs," Leif has heard of a legend telling of a remnant of them dwelling in the fastnesses of an unknown range of mountains in Alaska, and his desire to run this legend to earth is the reason for their being there.

By and by they come to an enormous valley surrounded by mountains like a wall surrounding a sunken garden. They seem to see a rock-strewn desert like a floor and suddenly they seem to see a lake. Apparently a mirage. Descending this mysterious valley they lose their packs and their rifles, which disappear as if dissolved, and, bent upon recovery, they follow and disappear also.

From now on the plot thickens to an almost impenetrable hardness.

Arriving on the floor of the valley, which they discover to be incredibly fertile, they meet adventures and "how." Jim rescues two dwarfs, male and female, who had been chained to a rock beneath flowers which dripped poisonous acid all over them. The dwarfs belonged to the little people or Rrrllya, living on one side of the river Nambu. On the other side of this river live the Ayjir, ruled over by the sorceress Lur, a green skinned, red haired woman, who claims to have come from Asia ere time began. The little people are ruled by Evalie, a beautiful golden haired normal girl, who does not know how she came there.

Leif and Evalie are married (the well known marrying complex of the native hero has to be gratified) and when Leif flashes the ancient ring bearing the image of "Khalk'ru," the malignant God, Evalie orders him to be thrown into the river Nambu. Leif is rescued by the Ayjir, whose prime minister, Tibur, scoffs at the idea that he is "Dwayann."

He is proclaimed as such by Lur, the sorceress who *via* hypnotism causes Leif to fall in love with her.

An attack is planned on Sirk, a city, where dwell the descenders from the cruel rites of "Kalk'ru," and after Sirk is taken Leif kills Tibur in a duel. He then becomes chief high priest to "Khalk'ru," but the death of his companion Jim Two Eagles makes him determined to end "Khalk'ru's" reign forever.

Evalie has been captured by Lur, but Leif arrives just in time to save her from being taken by "Khalk'ru," the malignant spirit, by destroying the point of contact where "Khalk'ru" was enabled to enter one world from the other plane where he dwelled normally.

Evalie and Leif then make their escape from the valley of the Mirage.

This is, roughly speaking, the approximate outline of Merritt's latest book. There is, of course, an allegory underlying the whole, if you care to read it into the story. It is the old, old saga of "good against evil," but considering the book merely from the scientific fiction fans' point of view, it is almost on par with "The Moon Pool," which is saying a very great deal.

I enjoyed the book immensely and I strongly recommend it.—C. A. B.

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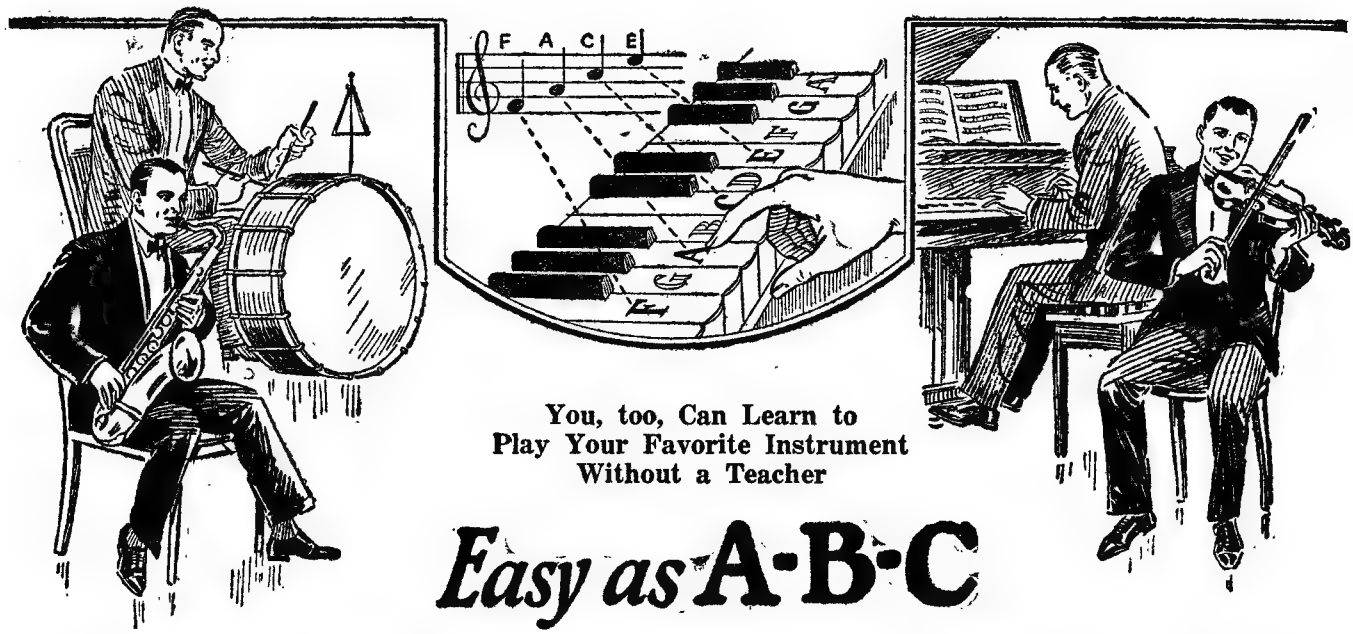

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TIME TRAVEL—DR. SMITH UPHELD AND ADMIRED

Editor, AMAZING STORIES:

I really must write in and tell you how much I like the July issue of "our" mag. The cover by Morey was excellent; the best I've ever seen on any science fiction magazine. The coloring was marvelous, and as to mechanical detail, it was all x. I'm glad to see such work from Morey, long may he wave!

As usual, DISCUSSIONS is very interesting. I was particularly enthralled by a letter from George R. Turner; *re* time-travel. His "theories" were, to say the least, rather startling. While not an ardent believer in the possibility of time-travel myself, I could see a flaw in his mode of reasoning.

The latter part of paragraph seven in his letter contains two highly contradictive statements. To begin with, he cites the well-known paradox of a man hopping into time a day after the date scheduled for his demise; thereby cheating the Grim Reaper. Immediately after delivering this "crushing" blow to the hopes of all expectant time-travelers, he states that a man, entering the "time-stream" would die of old age before he reached his destination: 1,000 years after boarding said vessel. His last statement is the fly in the ointment. He admits that a man traveling in time would be subject to old age; in other words, you may accelerate your speed in the "time stream," but, nevertheless, you age perceptibly. A ten year old, therefore, stepping into a machine set to deliver him fifty years into the future, would be sixty years of age at arrival, even though the trip consumed but ten seconds of time, as we know it. To return to Mr. Turner's first statement; the man to die tomorrow will just hop into the day *AFTER* tomorrow, robbing Mr. Undertaker of much needed work. If Mr. Turner's second paradox is to be taken seriously, the man would arrive in the day after tomorrow—dead! That would result from his having been subject to the ravages of fate no matter whether he be ensconced in time-traveler or not! I hope I've made myself clear in this matter, and if Mr. Turner detects any flaws in my reasoning, please let me know.

Heh heh! Bet that Miss Robb will be "kicked to death by little red spiders" now. That was a withering retort Dr. Smith sent her way. Personally I believe that the colloquialisms used by the good Doc. in his yarns enhances their values in the minds of devoted scientifictionists.

Boy, oh boy! In the footnote to the letter of Carlos Gonzales you intimate that AMAZING STORIES will—aw! I mean might—have a radio program in the future. That was, undoubtedly, the best thing I've ever read in the DISCUSSIONS COLUMNS. I only hope the idea will materialize.

Don't know how you do it, but AMAZING STORIES certainly does contain the finest STF yarns published. The only story I didn't like was "Television Hill." It seemed to me rather stereotyped, and dull. However, the good ones are not "good"—they are "excellent!"

The announcement of a coming story by Campbell, Jr., is more than I had expected. His stories are always welcome, as, in fact, are stories by all your authors.

Fred C. Miles,
3000 Springfield Ave.,
New Providence, N. J.

(Your wishes for the long waving of Morey are certainly backed by us. He puts thought as well as effort into his black and white drawings and we consider that his covers are constantly improving. Your "time travel" discussion is interesting, though there is certainly nothing concrete or definite to say on the subject. Poor Miss Robb.—As much as we admire Dr. Smith's work, which has met with such great appreciation from our readers, it seems almost sad that all our correspondents who touch on the subject are so hard on Miss Robb's.—We wonder if she will continue her discussions or if she feels it is a case of "nuf said." The fact that you do not care for "Television Hill" is an illustration of the difficulty or rather impossibility of an Editor pleasing everybody. This story was admired by a great many of our readers, but we cannot tell you how gratified we are on the way you compliment the results of our work and we can assure you that work and responsibility are the Editor's crowns. All we can say about the radio program is that it is very doubtful, but there is no telling what may come to pass in the future.—EDITOR.)

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EFFECT OF DISTANCE ON OBSERVATION OF PASSING EVENTS

Editor, AMAZING STORIES:

I'm another one of these A. S. bugs and can hardly wait for it to appear on the newsstands each month. The stories I have enjoyed the most recently were: "Omega"—Let's have more like it; also I liked "The Stone from the Green Star" and the "Metal Doom."

There is a question I would like to ask which has been puzzling me for a long time. It is this: Astronomers and scientists say light travels 186,000 miles a second. They also say there are stars which this light takes hundreds and perhaps thousands of years to reach the earth from. Well, supposing a telescope was developed with sufficient power to bring a star five hundred (500) light years away close enough so that cities or inhabitants upon it could be seen. Would not they be seeing things which had happened 500 years ago? It seems to me they would. I should think the image would come on this beam of light as a picture is made up of light and dark shadows anyway. What do you think? This might be a good base for a story? Maybe somebody can use it.

I've got one objection to a lot of your stories. It is the way they portray the villain. He is always some sort of a cad and always a bum. It seems as if he were taken out of an old-fashioned melodrama and placed in a new world.

Well, before closing, I want to renew my request for more stories like "Omega."

Wm. Koch,
Rutland, Vermont.

(The telescope you picture so graphically would undoubtedly show the events of long ago. If we reverse your idea it will lead to a very curious thought. Suppose that astronomers on various stars might be looking at the earth, some of them perhaps seeing the Battle of Waterloo and some perhaps the events of the Great World War. In other words, astronomers working simultaneously might be taken as seeing events happening hundreds of years apart on our sphere. This, you will perceive, is the reciprocal of your suggestion and seems to emphasize the point a little more impressively. The subject certainly might be a good basis for a story.—EDITOR.)

SHORT STORIES THAT ARE REALLY SHORT OBJECTED TO. FAVORITE AUTHORS NAMED

Editor, AMAZING STORIES:

I have read your magazine for only a short while, but I am already a staunch booster of your publication. I was introduced to AMAZING STORIES by a friend of mine, who also regards it highly. Your policy of constantly trying to improve AMAZING STORIES cannot help but bring new readers.

Much comment has passed on the subject of illustrations, urging you to use other artists for your front cover. Perhaps you should give other artists a chance, but keep Morey at any rate, for he has done some fine work for AMAZING STORIES.

Watch out, because a brickbat is coming: In your May issue, the staff slipped up a little by putting in a story called "The Doubt"—In the first place it was too short to be of any value, while in the second place it was not a story for a science fiction magazine because (as far as I could see) there was no science in it.—Yes! I might as well say it—was it put in to take up space? This surprises me as there are many more popular uses to which you could have put that valuable space. Photos and biographies of the authors for instance. Would be glad to take back any unkind words I have said if the editor will show me where I'm wrong. Could it be possible to put the magazine on at least a 98% level?

Dr. Keller scored again with his "Metal Doom" which, besides being excellent reading matter, furnishes a problem which gives food for thought. I am glad to note that Dr. Keller is a regular contributor. Using such authors as Keller, Williamson, Leinster, Smith, etc. AMAZING STORIES seems to keep a jump ahead of the other Science Fiction magazines.

How about another story by Francis Flagg—His "Cities of Ardathia" was one of the best science stories I have ever read. I am surprised that this story has not received much comment in the Discussions column.

As Dr. Edward E. Smith has made such a hit with the readers of AMAZING STORIES, how about adding Clark Ashton Smith to your list of contributors? Or has he already been added? Stories by Ray Cummings, Charles Diffin and Edgar Burroughs would fit into A. S.

Good Luck to "The Aristocrat of Scientific Fiction."

Ben Freed,
6815 Frankstown Ave.,
Pittsburgh, Pa.

(It seemed to us that "The Doubt" was an extremely good story and at once a curious and interesting study in psychology. With regards to putting the magazine at a specific level, (98%) we realize that what is one man's meat is another man's poison and the percentages would differ widely from one another. If you look up Edgar A. Poe and O. Henry, you will find that some of their best stories are very short. It takes more skill to write good short stories than to drag them out to a great length. O. Henry will give you examples of the short story in its perfection. You must abandon the idea that a story has got to be long in order to be good. If you will look into the works of the two authors we have cited you will see how much merit may be condensed into a narration of 2,000 or 3,000 words.—EDITOR.)

AREN'T THERE HEROES IN EVERY COUNTRY?

Editor, AMAZING STORIES:

It's just the same old story with me: I have read A. S. since the middle of 1926. Through thick and thin, good and bad, etc. As I look back and read some of the old stories I can't help but notice the general upward trend of the authors' style as well as the marked improvement in the stories themselves, but I still think that there are some pretty bad ones that slip past, yet (why mention names—can't please every one.)

Now to get down to business: Why can't we have some more stories like those old humorous ones "Prof. Hicks' Inventions With A Kick" that used to run so popular?

I sure do think that you hit square when you printed Murray Leinster's story "Politics," that story is one of the best conceived of and best portrayed short stories that I have read in some time.

Since every one else is still talking about "Skylark" and "Spacehound" stories let me add one more request to the list for more of them.

The average run of stories may be entertaining, *BUT* not interesting like those written by men who are more than just story writers out for a little money. Men who put a little gray matter to work and who give such plausible explanations for far-fetched ideas. Men who can twist formulas and known facts until the reader is hard pressed to find the break in a seemingly air tight theory and yet do not go from the remotely plausible into the fantastic as some are prone to do.

Then, too, how about this race prejudice that has been in some of the recent stories. Race pride (Patriotism) is understandable but why rub it in on some of the nations. They may and may not act as the various authors say they will, but even if they will in the future, why make them suffer now? Most of them know that A. S. isn't read in United States alone. So why cause any ill feelings. Then, on the other hand, why make the U. S. the goat while Great Britain does all of the hero stuff, etc.

C. E. Cottrell,
206 So. Newport Ave.,
Tampa, Fla.

(The writer has felt often that one of his misfortunes was to have too acute a sense of humor. The magazine is, of course, run for the benefit of its readers, not for the purpose of pleasing a humorously disposed Editor, so there is the state of the case with regard to comic productions. We certainly admire the way you put your convictions into the fifth paragraph of your letter. You are going to get plenty of interplanetary stories, but you must remember that we are not an interplanetary magazine, but have readers of very varied tastes to please. We are sometimes surprised at the way the interplanetary theme lasts. Our

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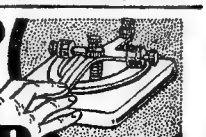

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writers seem to get the most varied stories out of it and we are glad to say stories which please our readers which come from the best writers we have. What you say about race prejudice is, we think, a little too positive. In the "Moon Pool" one of the greatly admired characters was an Irishman. While we desire to keep race prejudice out of our pages, we think that perhaps what you take for race prejudice is entirely unintentional on the part of our writers. We will be glad if your letter leads to further correspondence.—EDITOR.)

WHAT THE WRITER DENOMINATES HIS FIRST ATTEMPT

Editor, AMAZING STORIES:

Though I have read AMAZING STORIES almost from the very start, this is my first attempt at "having my say."

I can find nothing wrong with your magazine, except that it could be improved with more illustrations in both the Monthlies and Quarterlies. You state in your "Discussions" columns that space saving is all important. Why not, then, give half-page or quarter-page illustrations?

Also, why is your artist, Wesso always eliminated from the Monthlies? I think he is being slighted, in view of his skill.

During all the time that I have been reading A. S., there is only one story which stands out as the greatest. That one is, "The Other Side of the Moon," published about four or five years ago. I have since been looking for its equal.

Another thing!

Before I forget, I want to say that I don't agree with all those that jumped around praising "Skylark Three," "The Metal Horde" and such stories.

But really there is nothing very much wrong with the magazine.

E. M. McCarthy,
30-50 33rd Street,
Long Island City, N. Y.

(It is perfectly evident, as a simple mathematical proposition, that if we were to increase the number of illustrations in our magazine as you suggest, that the text would naturally be reduced. And that, if we can judge by the general tenor of the vast amount of correspondence we receive, is precisely what our readers do not want. When we find a change of opinion, we shall work on a change of plan. We thank you for your good wishes expressed at the end of your interesting letter.—EDITOR.)

A LETTER TO CHARLES L. CAMPBELL

Editor, AMAZING STORIES:

Your letter in AMAZING STORIES in the columns of Discussions, Mr. Campbell, has been called to my attention. You make some comment on my story, "Dramatis Personae," that was published in the AMAZING STORIES QUARTERLY, Fall edition, 1931. Your objection was to my use of the word "telepathy."

I agree with most of your criticism, especially when you say that telepathy is a faculty of the human soul. I quote also from your letter, "It is only abnormal people, or people in an abnormal mental condition, that can communicate by means of telepathy." You must concede that the characters in "Dramatis Personae" were not normal people. In this connection also let me remind you that what we consider abnormal night very properly be normal in the year twenty thousand.

I can tell by the context of your letter that you are a thinker, and you must realize that everything is relative, especially our thinking processes. An old philosopher has written, "The folly of today is the commonplace of tomorrow." Might we not say "The abnormal of today is the normal of tomorrow?"

Then, too, my dear Campbell, you must grant the author a great deal of license. I write stories and publish them as a hobby, having a business that requires most of my time and energy. I like to write to make people think, and for years I have been a student of science.

But in my writing, I heed the admonition of a fine old philosopher from Holland, Frank Hanson, who was my tutor for years. Frank used to say to me, "When you write, write for those who move their lips while reading."

I could debate for hours with you on the issue of telepathy, but space doesn't permit my proper defense at this time. Some day you and I are going to get together, open a bottle and a box of cigars and talk this thing over.

Now I am keenly aware of my own limitations, and I cheerfully admit to you that with my slight knowledge my attempt to handle the question of telepathy with all its marvelous possibilities, including scientific, mystical and spiritual, was an act of temerity on my part.

Joe W. Skidmore,
1909 Weepah,
Laurel Canyon,
Hollywood, Calif.

(This letter, from one of our authors, is interesting. Personally, we are inclined to almost unhesitatingly attribute alleged telepathic communication which are reported by firm believers to simple coincidence. Your quotation from your philosopher teacher is most interesting, but alas, how many people move their lips while reading. Some teachers try to teach their pupils who read to themselves to do two or three lines at a time. Charles A. Dana, a very prominent literateur and statesman of the past century was said to read two lines at a time. This sort of reading would preclude lip motion.—EDITOR.)

A YOUTHFUL CRITIC OF CAPT. MEEK'S RECENT STORIES. THE SCIENCE CORRESPONDENCE CLUB

Editor, AMAZING STORIES:

I noticed that quite an argument has been going on in "Discussions" Columns over Capt. Meek's story, "Submicroscopic," and its sequel, "Awlo of Ulm," so I decided to take part in it, even though it is nearly over. It seems that Capt. Meek has Courtney grow heavier as he increases his size by the addition of energy to the matter of his body, and that he was made lighter as he became smaller by taking energy away from the matter of his body. Since Courtney was a good sized man, weighing at least 175 pounds, he must withdraw practically 175 pounds of energy from his body whenever he made a trip to his submicroscopic world in order to keep the same specific gravity. However, the "rub" in that is that no man could stand the discharge of 175 pounds of energy from his body in such a short time, and still come out solid. He would probably be incinerated instantly. Also, Capt. Meek states that this energy was stored up in batteries for future use. This would immediately present an obstacle to his keeping his experiments secret, since the number of batteries necessary to store such a tremendous amount of energy could not be taken to the desert and hidden without considerable notice being taken by the railroad companies' employees, government agents, etc. Besides, the number of batteries used would keep the battery companies working double time to supply the demand, and the reasons for such a demand would soon be investigated. In fact, I think Courtney would have used his time and money better by using his invention for atomic power.

There is just one more thing I would like to say, and that is that I want to join the Science Correspondence Club and would like to know where I can get full particulars about it. I am fourteen years old and in first year high school and would like to correspond with any boy interested in electricity, radio, high frequency currents or anything like that.

I think A. S. is one of the best magazines on the market and that most of its stories are good. I have few suggestions as to how to improve the magazine, except there should be a little more science in it and less love.

David Bohm,
40 Hazle Street,
Wilkes-Barre, Pa.

(The stories you criticize met with so much approval that your letter is a good illustration of the proverb that what is one man's meat is another man's poison. Capt. Meek's efforts were entirely in the direction of fantasy and should be accepted as such. It is just as easy to imagine a man losing weight when he is brought down to submicroscopic size as to conceive of him being brought down to that size as a starter. We sometimes think that Capt. Meek should be true to his name to stand up for the serious criticism which has been lavished on these two charming little stories. To join the Science Correspondence Club you must address Walter Dennis, 4653 Addison Street, Chicago, Illinois.—EDITOR.)

STORIES SINCE ITS BEGINNING

Editor, AMAZING STORIES:

For the past six years it has been my discomfort to restrain my pent-up feelings concerning your periodical. I have read from the first issues of your magazine to the June number, which I have just finished. As many of your readers have praised the distinctiveness of it, I feel that it is my right to do so, also.

Possessing a class of stories, though some of them by the same authors, that outclass all others, your magazine deserves a place on all book-shelves. Your stories are not composed of the cut-and-dried kind of material. They rely upon novelty and ingeniousness for their readability. I have a marked preference for David H. Keller. His stories are always new. He puts a catching name to them that makes you want to read them. They are similar to the short-short stories that are the rage now. I mean by that, that they are composed of new ideas that are not dragged out to a tiring length.

As long as the A. S. has been published, it has had this desirable quality in its stories.

Now about reprints. Won't you ever uncover some of those old masterpieces of Scientifiction that thrilled the reading world? "The Moon Pool," "The Second Deluge?" Stories that now would be bound and saved. I don't believe there have ever been any stories written or ever will be written that can equal them.

I agree with one of your readers about editorials. I don't believe that there should be only one of them. They are usually so interesting, that I am disappointed that there is only one. You could insert one more full page into your periodical, making room for another page of editorials and a page in the back for more Discussions.

In the June issue I find a story that amuses me greatly. It was "A Matter of Nerves," by William Lemkin, Ph.D. In his tale of the subject, who, feeling hot for cold, cold for hot, he states that when he went into the cold air he felt hot. Then when he removed some of his garments, he felt cooler. The author has not quite followed his theme. If this unusual being took off some clothing, he would in reality be colder, thereby making him feel *hotter,* not *cooler.* This story, I think, will arouse much criticism, as it deserves a place in the type of story I mentioned at the beginning of my letter. I like a love theme running through almost any story. I, as much as many readers, disapprove of "sentiment," keeps a suspense, all its own. A few stories like "The Jameson Satellite" and others, are great enough without it. But with the sequels that are still coming (and very welcome) who knows what will happen.

Miss Olive Robb: Myself I am greatly in favor of a little slang in stories. It makes them human. (I simply have to poke my nose into any argument I see; I'm sorry.)

Neil E. Adams,
415 S. Birch Street,
Santa Ana, Calif.

(We are glad to hear you express your appreciation of Dr. Keller. He certainly has a way all his own and sometimes the last word of his story is what essentially completes it. It is like a touch of O. Henry, who is also very much distinguished for his endings. We recollect one of his stories in which the culmination was brought out by a single word. Dr. Lemkin, while not a very voluminous writer, does give us quite a number of stories. He is a personal scientist so that you always get good science in his narrations. Dr. Smith has taken good care of Miss Olive Robb. We are very curious to see whether she will answer Dr. Smith's powerful letter.—EDITOR.)

AN APPRECIATIVE LETTER ABOUT OUR WORK IN AMAZING STORIES

Editor, AMAZING STORIES:

Though I've only been reading your magazine for three years, I feel qualified to make a few criticisms both for and against the stories published by you.

One of your stories which I read, "Islands of Space," gave me an idea which I have carried out and led to a new means of communication. I am not saying that I am any great physicist, but I hope you keep publishing your magazine, for it has given me a lot of help in my research work. You may have helped others who haven't written you. At any rate the stories published do stimulate a person's "think-tank."

Another criticism is about the letter you published written by Miss Olive Robb of Waterloo, England. I agree with her very much, but there is a catch there. Dr. Smith probably uses it because of the increased use of slang nowadays would lead one to believe that more and more slang would be used in the future.

Many people write and say "How could such things happen?" Well, the one answer is "Why couldn't it?" An optimist would say that nothing is impossible.

There is one question I would like to ask. Try to answer it! According to the Fitzgerald Contraction, the mass of an object varies inversely as the speed until the velocity of light is reached. An electron travels 183,000 miles a second. Suppose it were slowed down, would its mass increase as its speed decreased, and if not, why not?

I've experimented on increased valence of an element since reading one of your stories and have made a number of discoveries. My colleague and I took one of the elements of the rare earth group and combined it with chlorine and gave it a positive valence of nine. All due to one of your wonderful stories.

Keep up the good work! Good luck.

Russel Haggard,
1521—7th Avenue W.
Seattle, Wash.

(It is very pleasant to feel that our magazine has inspired research work of any description even if such work leads to no result. It is extremely good training for those who indulge in it. One of our troubles is to find stories with sufficient science in them and your letter encourages us in the belief that perhaps we are doing better than we think. Dr. Smith, as you will see, has given a very long answer to Miss Robb on the subject of American slang. While many may personally believe that much material used in our stories will never come to pass, let it be remembered that Simon Newcomb, in his day one of the leading astronomers of the world, said that flying machines of the heavier-than-air type would never be possible. Professor Lesly, who was State Theologist of Pennsylvania, said that the great developments of oil of his day would have to cease from exhaustion of the supply and today so much oil is being produced that the industry can hardly take care of it. It certainly is risky to say that anything is impossible. The Fitzgerald contraction theory applies to the diminution in length of a body varying with the speed. Whatever deductions you may draw from your experiments if we have started you to experimenting in laboratory work, we will be very gratified. Experimenting is all important in evolving scientific theories.—EDITOR.)

A CORRESPONDENT SAYS WE SOMETIMES HIT A POOR NOTE. MORE ABOUT CAPTAIN MEEK'S STORIES

Editor, AMAZING STORIES:

I have been reading A.S. for about a year and have never had an opportunity to write before. Your stories are very good as a whole, but every once in a while you hit a poor note. The story "Light from Infinity," by L. A. Eshbach was among the best stories you have ever published. It had a good plot, a good ending and all other factors of a good story. Eshbach is a good author; keep him.

Now let me say a word about Captain S. P. Meek's letter concerning "Submicroscopic" and "Awlo of Ulm." The two stories were good; but I still don't see how Courtney took the machine into the Land of Ulm with him; it just does not seem right. I ask you, Mr. Editor, how did he do it?

The letter of Miss Olive Robb was amusing, even though I do not agree with her. In my opinion, Dr. Smith is one of the best authors you have and his writings are made better by the use of his slang, this slang which Miss Robb thinks so tiresome. Dr. Smith's stories would lose much of their charm and would appear dry, but for his clever slang. I think most of your readers will agree with me.

Milton Knotts,
Route 3, Box 119,
Texarkana, Ark.

(As far as Captain Meek's two stories and his letter are concerned, we don't see ourselves how Mr. Courtney took the machine into the land of Ulm, but we couldn't understand many things, which, when they became popular, seemed quite simple of explanation. The men seem particularly interested in Dr. Smith's slang.

How come?—EDITOR.)

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FIRST IN 1907 FIRST TO-DAY

No Appliances—No Drugs—No Dieting
ROSS SYSTEM NEVER FAILS. Fee Ten Dollars Complete
Convincing Testimony and Particulars 5 cents stamps.
"Allow time for return mails across the Atlantic"
T. MALCOLM ROSS, Height Specialist
Scarborough, England, (P. O. Box 15)

A Year's Protection Against **SICKNESS** **Less than 3c a Day!** *A Year's Protection Against* **ACCIDENT**

CASH or sympathy?

Which do you want?

Suppose you met with an accident or sickness tonight—salary stopped—which would you prefer

$25 Weekly . . . *or* Sympathy?

Which would you Pay?

Would you rather pay bills and household expenses out of a slim savings account or a . . .

Which will your family want?

In case of your accidental death, which would you rather give your family . . .

$10,000 Cash . . . *or* Sympathy?

$10 Bill

For a Whole Year's Protection Against

SICKNESS and ACCIDENT

NO MEDICAL EXAMINATION

$10 a Year Entire Costs.

No Dues. No Assessments.

MEN AND WOMEN

16 to 70 Years Accepted.

$10,000

Principal Sum.

$10,000

Loss of hands, feet or eyesight.

$25 Weekly Benefits

for stated Accidents or Sicknesses.

Doctor's Bills, Hospital Benefit, Emergency Benefit and other liberal features to help in time of need—all clearly shown in policy.

This is a simple and understandable policy—without complicated or misleading clauses. You know exactly what every word means—and every word means exactly what it says.

Get Cash instead of Sympathy. If you met with an accident in your home, on the street, or road, in the field, or on your job—will your income continue? Remember, few escape without accident—and none of us can tell what tomorrow holds for us. While you are reading this warning, somewhere some ghastly tragedy, some flood or fire, some automobile or train disaster, is taking its toll of human life or limb. Protect yourself now.

Get Cash instead of Sympathy.

If you suddenly became ill—would your income stop? What if you contracted lobar pneumonia, appendicitis operation, or any of the many common ills which are covered in this strong policy, wouldn't you rest easier and convalesce more quickly if you knew that our company stood ready to help lift from your shoulders, distressing financial burdens in case of a personal tragedy? Protect yourself now.

Get Cash instead of Sympathy.

Don't Wait for Misfortune to Overtake You

Mail the Coupon today!

Mail the Coupon before it's too late to protect yourself against the chances of fate picking you out as its next victim.

North American Accident Insurance Co.,
228 Wallach Building, Newark, New Jersey.

Gentlemen: At no cost to me send copy of your booklet "Cash or Sympathy."

Name.....

Address.....

City.....*State*.....

NORTH AMERICAN ACCIDENT INSURANCE CO. [*of Chicago*]

228 WALLACH BUILDING, NEWARK, NEW JERSEY

Largest and Oldest Exclusive Health and Accident Insurance Company in America

Under Supervision of 48 State Insurance Departments

ESTABLISHED OVER 45 YEARS

Agents Wanted For New Territory

Give me your measure and I'll *PROVE* You Can Have A Body like Mine!

NOTE:

No other Physical Instructor in the World has ever DARED make such an offer!

I'll give you PROOF in 7 DAYS that I can turn you, too, into a man of might and muscle. Let me prove that I can put layers of smooth, supple, powerful muscles all over your body.

If you are underweight I'll add the pounds where they are needed and, if you are fat in any spots, I'll show you how to pare down to fighting trim.

And with the big muscles and powerful, evenly-developed body that my method so quickly gives you I'll also give you through-and-through health—health that digs down into your system and banishes such things as constipation, pimples, skin blotches and the hundred-and-one similar conditions that rob you of the good times and the good things of life.

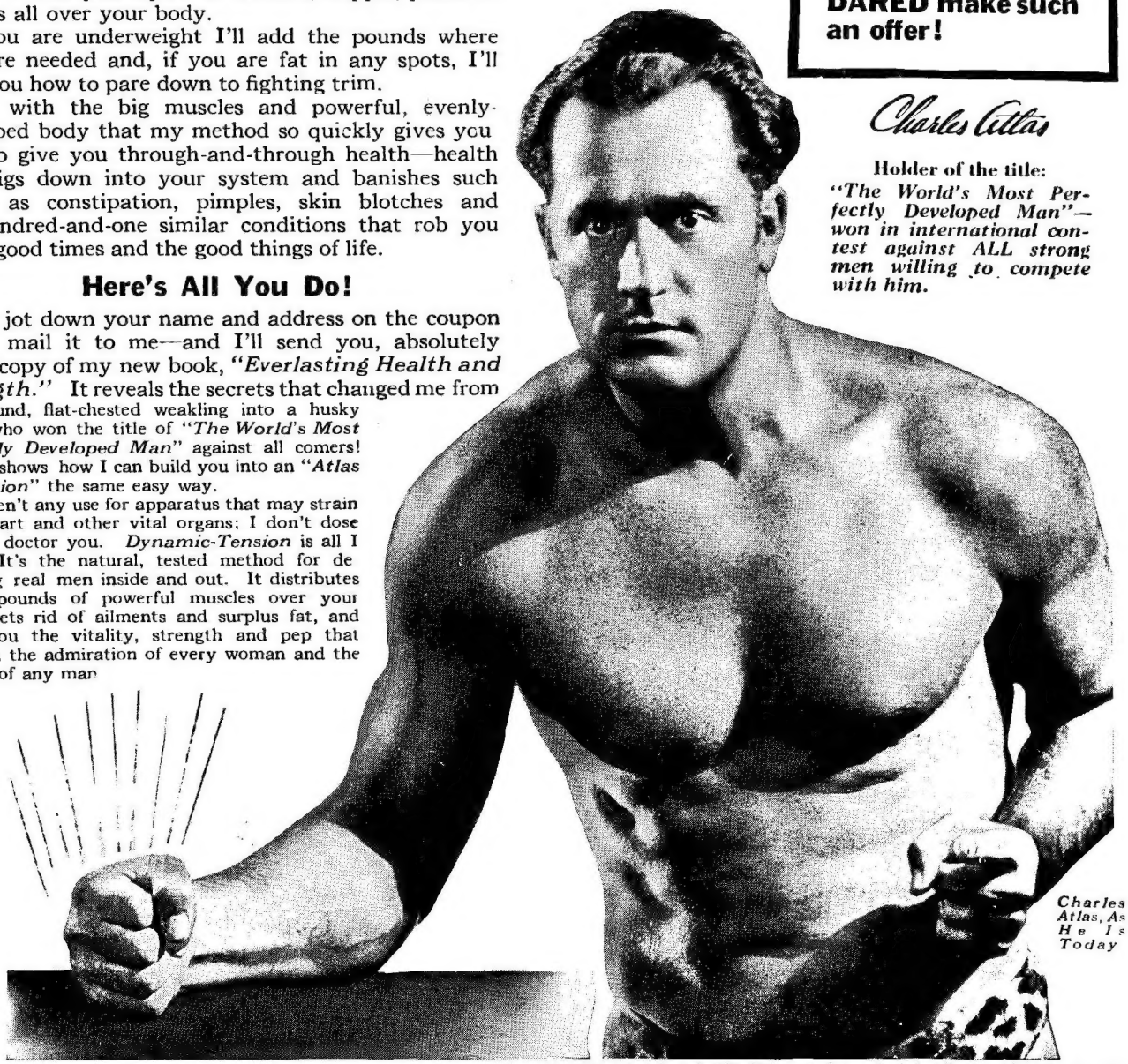
Here's All You Do!

Just jot down your name and address on the coupon below, mail it to me—and I'll send you, absolutely free, a copy of my new book, *"Everlasting Health and Strength."* It reveals the secrets that changed me from a 97-pound, flat-chested weakling into a husky fellow who won the title of *"The World's Most Perfectly Developed Man"* against all comers! And it shows how I can build you into an *"Atlas Champion"* the same easy way.

I haven't any use for apparatus that may strain your heart and other vital organs; I don't dose you or doctor you. *Dynamic-Tension* is all I need. It's the natural, tested method for developing real men inside and out. It distributes added pounds of powerful muscles over your body, gets rid of ailments and surplus fat, and gives you the vitality, strength and pep that win you the admiration of every woman and the respect of any man

Charles Atlas

Holder of the title:
"The World's Most Perfectly Developed Man"—won in international contest against ALL strong men willing to compete with him.



Charles Atlas, As He Is Today

Gamble a Stamp---To Prove I Can Make YOU a New Man!

Gamble a stamp today by mailing the coupon for a free copy of my book, *"Everlasting Health and Strength."* It tells you all about my special *Dynamic-Tension* method, and what it has done to make big-muscled men out of run-down specimens. It shows you, from actual photos, how I have developed my pupils to the same perfectly balanced proportions of my own physique, by my own secret methods. What my system did for me, and these hundreds of others it can do for you too. Don't keep on being only 25 or 50 percent of the man you can be! Find out what I can do for you.

Where shall I send your copy of *"Everlasting Health and Strength?"* Jot your name and address down on the coupon, and mail it today. CHARLES ATLAS, Dept. 10-Y 133 East 23rd Street, New York City.

CHARLES ATLAS, Dept. 10-Y
133 East 23rd Street, New York City.

I want the proof that your system of *Dynamic-Tension* will make a New Man of me—give me a healthy, husky body and big muscle development. Send me your free book, *"Everlasting Health and Strength."*

Name .....
(Please print or write plainly)

Address .....

City ..... State .....

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A Blessing in "Hard Times"

New Soles as low as 9¢ A PAIR

FREE SAMPLE SAVASOLE

To Readers of This Magazine

See this amazing new discovery that ends shoe repair bills—makes buying new shoes unnecessary. It's called SAVASOLE—a scientific plastic material which spreads on worn soles and heels like spreading butter on bread. Hardens overnight. Makes "worn-out" shoes like new—makes them wear for months and months. Cost of half soles with Savasole as low as 9c a pair. The plastic material fills in all cuts, holes, cracks, forming a smooth, flexible, waterproof, non-skid surface. A patch for a penny, or a new half sole for a few cents. Agents and distributors CLEANING UP with this sensational "hard times" specialty. New low price means EVERYBODY buys. Mail coupon NOW for Free Sample on leather and big money-making agents' offer. Learn how YOU can earn up to $42 A DAY with Savasole.

Pays Agents UP TO $42 A DAY

Dries Hard and Smooth Overnight

No more taking shoes to the cobbler. No paying from $1.00 to $1.75 for leather or rubber soles and heels. No more pegs, nails, or stitches to hurt the feet. No more shoes pulled out of shape by stiff leather half soles. No more buying new shoes. Just spread SAVASOLE on the worn-out soles and heels or merely patch the worn spots. Let it dry overnight. In the morning you have a new wearing surface that is hard, smooth and durable. Flexible—comfortable—will not "draw" the feet. Wears like leather and is absolutely waterproof. CANNOT COME OFF. Your satisfaction is GUARANTEED.

1001 USES Savasole is splendid for repairing auto tires, auto tops, boots, rubbers, gloves, galoshes, harness, leather belts, canoes, tarpaulins, sporting goods, garden hose, leather furniture—anything made of leather, rubber or cloth can be easily and cheaply repaired or resurfaced with Savasole.

Here is an old shoe, worn down, ready to be sent to the cobbler, who would charge $1 to $1.75 for a first-class job.

BEFORE

AFTER

Here is the same shoe repaired with SAVASOLE. No hammer, nails or pegs. Just use an old knife. All cracks and breaks filled in and covered up with long-wearing, smooth, flexible, water-proof, non-skid surface. SAVASOLE repairs shoes for one-tenth the cost of ordinary heels and soles.

AGENTS BREAKING PROFIT RECORDS!

Naturally, everybody is a customer for this amazing invention, which has scores of uses in EVERY household. Big margin of profit on quick, easy sales. Lewis sold over $20,000 worth of Savasole. Kimura just got $500 Cash Bonus IN ADDITION to his splendid earnings. Elford buys in 10-gross lots. Morrill, Pim, Baker and scores of others earning more money than they ever made before. Savasole is a marvelous "hard times" item. The poorer people are the more they need to SAVE money. And every set of SAVASOLE saves from $5.00 to $50.00 in repairs and new purchases.

ACT AT ONCE

Desirable territories are being "snapped up" by hustlers. Plenty of good territories still open. Get yours NOW! We show you how to make quick convincing demonstrations that amaze customers and get the orders. Every family needs Savasole. Repeat business everywhere. Rush coupon now for Free Sample on leather and special starting offer.

SAVASOLE COMPANY
J-57 Daylight Bldg. Cincinnati, Ohio

MAIL FOR FREE SAMPLE

R. R. Bollman, Pres., Savasole Company.
J-57 Daylight Bldg., Cincinnati, Ohio

Dear Mr. Bollman: Please send me FREE Sample of SAVASOLE on leather, your starting offer and explain how I can earn up to $42 on your exclusive territory plan. Send everything FREE and without obligation.

NAME .....

ADDRESS .....

CITY ..... STATE .....

TERRITORY PREFERRED .....